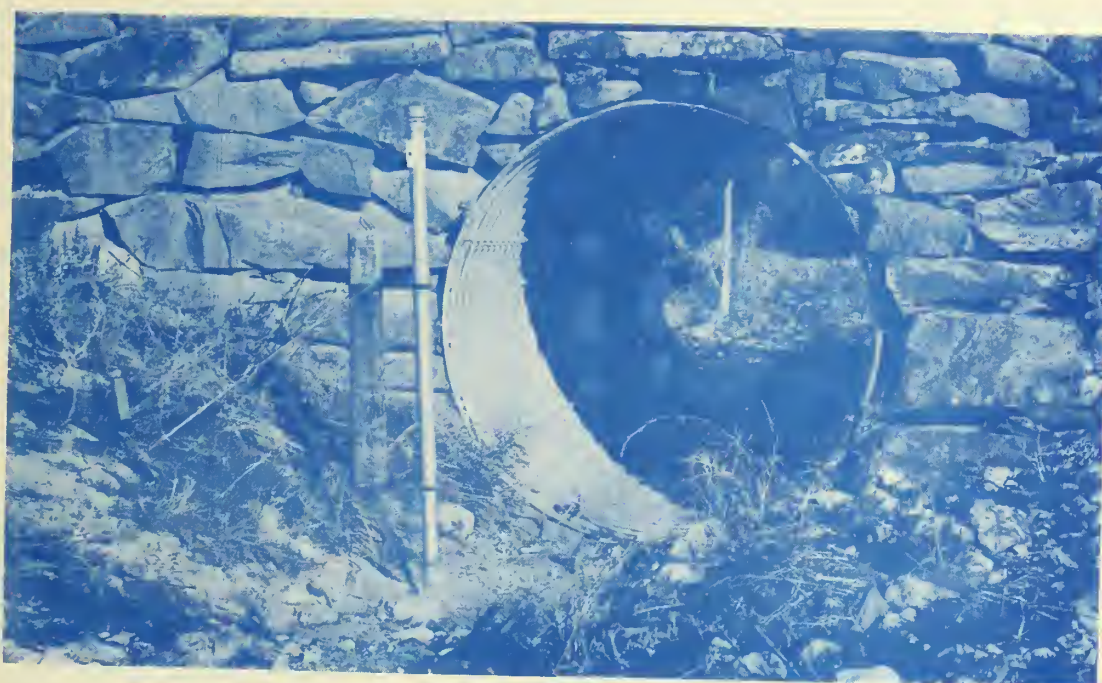


5.71.48
4500
1967

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ANNUAL PEAK DISCHARGES
FROM SMALL DRAINAGE AREAS
IN MONTANA

Through September 1966



Prepared in cooperation with the
MONTANA STATE HIGHWAY COMMISSION
and

U. S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

Helena, Montana
April 1967

MONTANA STATE LIBRARY
930 East Lyndale Avenue
Helena, Montana 59601

Montana State Library



3 0864 1006 4308 2

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ANNUAL PEAK DISCHARGES FROM SMALL
DRAINAGE AREAS IN MONTANA
THROUGH SEPTEMBER 1966

by
Fred C. Boner

Prepared in cooperation
with the
Montana State Highway Commission
and the
U. S. Department of Commerce, Bureau of Public Roads

Helena, Montana
1967



Digitized by the Internet Archive
in 2013

http://archive.org/details/annualpeakdischa00unit_0

CONTENTS

	Page
Introduction	1
Purpose of the program	2
Details of program operation	2
Gaging stations	2
Station network	3
Program activities, 1966 water year	5
Program plans, 1967 water year.	6
Presentation of data	7
Gaging-station records.	9
Missouri River basin	
1 Long Creek near Lakeview.	9
2 Red Rock River tributary near Monida.	9
3 Traux Creek near Lima	10
4 Muddy Creek near Dell	10
5 Sheep Creek below Muddy Creek, near Dell.	11
6 Sage Creek tributary near Dell.	12
7 Grasshopper Creek near Dillon	13
8 Beaverhead River tributary near Dillon.	14
9 Beaverhead River tributary No. 2 near Dillon.	14
10 Idaho Creek near Alder.	15
11 Moose Creek near Divide	15
12 Fish Creek near Silverstar.	16
13 Jefferson River tributary near Whitehall.	16
14 Jefferson River tributary No. 2 near Whitehall	17
15 Sand Creek at Sappington.	17
16 Jefferson River tributary No. 3 near Sappington.	18
17 Jefferson River tributary No. 4 near Three Forks	18
18 Jefferson River tributary No. 5 near Three Forks	19
19 Squaw Creek near Gallatin Gateway	19
20 Logger Creek near Gallatin Gateway.	20
21 East Gallatin River near Bozeman.	20

Gaging-station records - Continued

Page

Missouri River basin - Continued

22	Pitcher Creek near Bozeman.	21
23	Bear Canyon Creek near Bozeman.	21
24	Castle Creek tributary near Ringling.	22
25	Cabin Creek near Townsend	22
26	Deep Creek below North Fork Deep Creek, near Townsend.	23
27	Mitchell Gulch near East Helena	23
28	Jackson Creek near East Helena.	24
29	Crystal Creek near East Helena.	24
30	McClellan Creek at City diversion dam, near East Helena	25
31	Little Porcupine Creek tributary near Helena.	25
32	Lyons Creek near Wolf Creek	26
33	Dog Creek near Craig.	26
34	Wegner Creek at Craig	27
35	Five Mile Creek near White Sulphur Springs.	27
36	Newland Creek near White Sulphur Springs.	28
37	Sheep Creek near Neihart.	29
38	Nuggett Creek near Neihart.	29
39	Smith River tributary near Eden	30
40	Goodman Coulee near Eden.	30
41	Beaver Creek at Gibson Dam, near Augusta.	31
42	Muddy Creek tributary near Power.	31
43	Sun River tributary near Great Falls.	32
44	Middle Fork Dry Fork Marias River near Dupuyer	32
45	Heines Coulee tributary near Valier	33
46	Lone Man Coulee near Valier	33
47	Marias River tributary No. 3 near Choteau	34
48	Cottonwood Creek tributary near Chester	34
49	Cottonwood Creek tributary No. 2 near Chester	35
50	Dead Indian Coulee near Fort Benton	35
51	Dry Fork Coulee tributary near Loma	36
52	Marias River tributary at Loma.	36
53	Marias River tributary No. 2 at Loma.	37
54	Bruce Coulee tributary near Choteau	37
55	Kinley Coulee near Dutton	38
56	Kinley Coulee tributary near Dutton	38
57	Judith River tributary near Utica	39
58	Judith River tributary No. 2 near Utica	39
59	Casino Creek tributary near Lewistown	40
60	Cottonwood Creek near Moore	40
61	Missouri River tributary near Landusky.	41
62	Duval Creek near Landusky	41
63	Antelope Creek tributary near Harlowton	42
64	Antelope Creek tributary near mouth, near Harlowton	42
65	Antelope Creek tributary No. 2 near Harlowton	43

Gaging-station records - Continued

Page

Missouri River basin - Continued

66	Antelope Creek at Harlowton.	43
67	Currant Creek near Roundup	44
68	South Willow Creek tributary near Roundup. . .	44
69	Musselshell River tributary near Musselshell .	45
70	Home Creek near Melstone	45
71	Butts Coulee near Melstone	46
72	South Fork Bear Creek near Roy	46
73	South Fork Bear Creek tributary near Roy . . .	47
74	Box Elder Creek tributary near Winnett	47
75	North Fork McDonald Creek tributary near Heath	48
76	Alkali Creek near Heath.	49
77	South Fork McDonald Creek tributary near Grass Range.	49
78	McDonald Creek at Winnett.	50
79	Gorman Coulee near Cat Creek	51
80	Gorman Coulee tributary near Cat Creek	51
81	Cat Creek near Cat Creek	52
82	Second Creek tributary near Jordan	52
83	Second Creek tributary No. 2 near Jordan . . .	53
84	Second Creek tributary No. 3 near Jordan . . .	53
85	Little Dry Creek near Van Norman	54
86	Livermore Creek near Babb.	54
87	Middle Fork Milk River near Babb	55
88	Dry Fork Milk River near Babb.	55
89	Milk River near Del Bonita	56
90	Van Cleeve Coulee tributary near Sunburst. . .	56
91	Sage Creek tributary at Hingham.	57
92	South Fork Spring Coulee near Havre.	57
93	Spring Coulee near Havre	58
94	Big Sandy Creek near Assinniboine.	59
95	Bullhook Creek near Havre.	60
96	Milk River tributary near Lohman	60
97	Black Coulee near Malta.	61
98	Alkali Creek near Malta.	61
99	Disjardin Coulee near Malta.	62
100	South Fork Taylor Creek near Malta	62
101	Unger Creek near Vandalia.	63
102	Mooney Coulee near Tampico	63
103	Milk River tributary No. 2 near Glasgow. . . .	64
104	East Fork Sand Creek near Vida	64
105	West Fork Wolf Creek near Lustre	65
106	East Fork Wolf Creek near Lustre	65
107	Wolf Creek tributary near Wolf Point	66
108	Wolf Creek tributary No. 2 near Wolf Point . .	66
109	Wolf Creek near Wolf Point	67
110	East Fork Duck Creek near Brockway	68
111	Duck Creek near Brockway	68
112	Redwater Creek at Brockway	69
113	Tusler Creek near Brockway	69
114	Tusler Creek tributary near Brockway	70
115	Redwater Creek tributary near Brockway	70

Gaging-station records - Continued

Page

Missouri River basin - Continued

116	South Fork Dry Ash Creek near Circle	71
117	McCune Creek near Circle	71
118	Cow Creek tributary near Vida.	72
119	Wolf Creek tributary near Vida	72
120	Missouri River tributary No. 2, near Brockton	73
121	Big Muddy Creek at Plentywood.	74
122	Box Elder Creek near Plentywood.	75
123	Box Elder Creek at damsite, near Plentywood	75
124	Spring Creek near Plentywood	76
125	Spring Creek at Highway 16, near Plentywood	76
126	Big Muddy Creek tributary near Culbertson.	77
127	Missouri River tributary No. 3 near Culbertson.	77
128	Missouri River tributary No. 4 near Bainville	78
129	Missouri River tributary No. 5 at Culbertson.	78
130	Yellowstone River tributary near Greycliff.	79
131	Bridger Creek near Greycliff...	79
132	Work Creek near Reed Point.	80
133	Hump Creek near Reed Point.	80
134	Berry Creek near Columbus	81
135	Allen Creek near Park City.	81
136	Wets Creek near Billings.	82
137	West Buckeye Creek near Billings.	82
138	Pryor Creek near Billings	83
139	Crooked Creek tributary near Shepherd . . .	84
140	Yellowstone River tributary No. 2 near Pompeys Pillar.	84
141	Andresen Coulee near Custer	85
142	Unknown Creek near Bighorn.	85
143	Buckingham Coulee near Myers.	86
144	Middle Fork Froze to Death Creek tributary near Ingomar	86
145	Yellowstone River tributary No. 3 near Forsyth	87
146	Little Porcupine Creek near Forsyth	87
147	Rosebud Creek near Kirby.	88
148	Rosebud Creek tributary near Busby.	88
149	Ridgewalker Creek near Busby.	89
150	Whitedirt Creek near Lame Deer.	89
151	Rosebud Creek near Forsyth.	90
152	Snell Creek near Hathaway	91
153	Spring Creek near Decker.	91
154	Leaf Rock Creek near Kirby.	92
155	Spring Creek near Ashland	92
156	Walking Horse Creek near Ashland.	93
157	Stebbins Creek near Ashland.	93
158	Stebbins Creek at mouth, near Ashland . . .	94
159	Basin Creek tributary near Volborg.	94
160	Basin Creek near Volborg.	95

Gaging-station records - Continued

Page

Missouri River basin - Continued

161	North Fork Sunday Creek tributary at Rock Springs.	95
162	Dry House Creek near Angela	96
163	North Fork Sunday Creek tributary No. 2 near Angela.	96
164	Deep Creek near Kinsey.	97
165	Meadow Creek near Locate.	97
166	Sand Creek near Broadus	98
167	Meyers Creek near Locate.	98
168	O'Fallon Creek near Ismay	99
169	O'Fallon Creek tributary near Ismay	99
170	Deep Creek near Baker	100
171	Pennel Creek near Baker	100
172	Yellowstone River tributary No. 4 near Fallon.	101
173	Yellowstone River tributary No. 5 near Marsh	101
174	Krug Creek tributary near Wibaux.	102
175	Griffith Creek near Glendive.	102
176	Linden Creek at Intake.	103
177	Indian Creek at Intake	103
178	War Dance Creek near Intake	104
179	First Hay Creek near Sidney	104
180	North Creek near Alzada	105
181	Wolf Creek near Hammond	106
182	Willow Creek near Alzada.	107
183	North Fork Coal Bank Creek near Mill Iron	107
184	Soda Creek tributary near Webster	108
185	Spring Creek near Wibaux.	108

Columbia River basin

186	Fortine Creek near Trego.	109
187	Deep Creek near Fortine	110
188	Kootenai River tributary near Rexford	110
189	Gold Creek near Rexford	111
190	Little Jackson Creek near Libby	111
191	Peoples Creek near Libby.	112
192	Severn Gulch near Jennings.	112
193	Tub Gulch near Libby.	113
194	Shaughnessy Creek near Libby.	113
195	Whitetail Creek near Yaak	114
196	Cyclone Creek near Yaak	114
197	Fourth of July Creek near Yaak.	115
198	Smith Gulch near Silverbow.	115
199	Clark Fork tributary near Drummond.	116
200	Morris Creek near Drummond.	116
201	Edwards Gulch at Drummond	117
202	West Twin Creek near Bonner	117
203	Marshall Creek near Missoula.	118

Gaging-station records - Continued

	Page
Columbia River basin - Continued	
204 Burke Gulch near Darby.	118
205 Camas Creek near Hamilton	119
206 Willow Creek near Corvallis	119
207 Gash Creek near Victor.	120
208 Kootenai Creek near Stevensville.	120
209 Burnt Fork Creek near Stevensville.	121
210 Eightmile Creek near Florence	122
211 Hayes Creek near Missoula	122
212 Nigger Gulch near Alberton.	123
213 Flat Creek near Superior.	123
214 Thompson Creek near Superior.	124
215 East Fork Timber Creek near Haugan.	124
216 St. Regis River tributary near St. Regis.	125
217 North Fork Little Joe Creek near St. Regis.	125
218 Skyland Creek near Essex.	126
219 Moccasin Creek near West Glacier.	127
220 Middle Fork Flathead River tributary at West Glacier.	127
221 Spring Creek near Stryker	128
222 Rock Creek near Olney	128
223 Teepee Creek near Polson.	129
224 Hell Roaring Creek near Polson.	129
225 Dayton Creek near Proctor	130
226 Mill Creek near Niarada	131
227 Sullivan Creek tributary near Niarada	131
228 South Fork Garden Creek near Hot Springs.	132
Index to gaging stations	133

ILLUSTRATION

Figure 1. Map showing location of gaging stations and major drainage basins.	139
---	-----

ANNUAL PEAK DISCHARGES FROM SMALL
DRAINAGE AREAS IN MONTANA
THROUGH SEPTEMBER 1966

by
Fred C. Boner

INTRODUCTION

A cooperative program to investigate the magnitude and frequency of floods from small drainage areas in Montana was begun July 1, 1955. The original agreement was for the establishment of and collection of data at 45 crest-stage gaging stations. The program was expanded to 138 gaging stations in 1959 and to 202 gaging stations in 1963. Although some stations have been dropped from the network, others have been added to keep about 200 stations in operation since 1963. The investigation is financed through an agreement between the Montana State Highway Commission and the U. S. Geological Survey which provides for the full reimbursement of appropriate costs by the Highway Commission Planning Survey. The U. S. Bureau of Public Roads cooperates in the program by reimbursing the Highway Commission for approximately three-fourths of the total program costs.

This is the twelfth annual report prepared to inform the cooperators and other interested parties of the status of the program. The report is primarily a tabulation, by water year, of the annual peak stage and discharge at each crest-stage

gaging station. It also summarizes the activities and progress made during the 1966 water year.

Data on outstanding flood events and streamflow at sites where crest-stage gages are not operated were furnished on request to Mr. L. W. Hargrove, Hydrologist, Montana State Highway Commission.

The program is under the general supervision of Charles W. Lane, District Chief, and under the direct supervision of Fred C. Boner, Hydrologist, of the Water Resources Division, U. S. Geological Survey.

PURPOSE OF THE PROGRAM

The primary purpose of the program is to define the magnitude and frequency of floods, on a regional basis, for the entire State of Montana. Hydrologic data on small drainage areas are being collected to supplement the data obtained from the established cooperative stream-gaging program of the Geological Survey. The ultimate objective of the program is to make information available on the magnitude and frequency of floods for various sizes and types of drainage basins for use in designing adequate highway drainage structures.

DETAILS OF PROGRAM OPERATION

Gaging Stations

Equipment at a crest-stage gaging station consists of

one or more standard Geological Survey crest-stage gages. These gages are designed to record the maximum stage reached by the water surface at the gaging station site. Many crest-stage gaging stations are located at highway culverts because the culvert can be used as a convenient tool for measuring peak discharge. Given the shape of the natural channel in the vicinity of the culvert, the culvert geometry, and the water-surface profile upstream and downstream from the culvert at the time of the peak flow, the peak discharge can be computed. The water-surface profile, obtained from marks recorded on the crest-stage gages, is usually supplemented by nearby high-water marks along the stream channel.

A few continuous-record gaging stations, formerly operated through other cooperative agreements, have been operated for this program. These stations are an important supplement to the crest-stage network because they provide data for establishing the dates of peaks at crest-stage sites and comparison between the magnitude of peaks recorded during the present period of data collection and peaks recorded prior to the start of the program.

Station Network

The gaging station network at the beginning of the 1966 water year consisted of 202 stations. During the year, the crest-stage gaging station on Beaverhead River Tributary No. 2

near Dillon was discontinued because several irrigation canals, constructed upstream from the station, disrupted the normal runoff pattern of the drainage basin. At the end of the 1966 water year, 191 crest-stage and 10 continuous-record gaging stations were in operation under this program. The approximate location of each gaging station is shown in figure 1.

The gaging stations are located to provide information on drainage areas that range in size from less than one square mile to several hundred square miles and represent various hydrologic conditions. The network has 25 stations with drainage areas of less than one square mile, 102 stations from 1 to 10 square miles, 54 stations from 10 to 50 square miles, and 20 stations with more than 50 square miles.

In addition to the stations operated in cooperation with the Highway Commission, the Geological Survey maintains 14 crest-stage gaging stations in eastern Montana in cooperation with the Montana State Water Conservation Board. These stations are included in this report in both the downstream and alphabetical listings, and are shown in figure 1.

About 60 unpaid observers collected precipitation data during summer months of the water year. The data included the amount and duration of rainfall for storms of more than half an inch of precipitation. They supplemented the U. S. Weather Bureau data and are extremely useful in determining the date of a peak flow on a nearby stream and may be of value in flood frequency analysis.

Program Activities, 1966 Water Year

Operation of the crest-stage gages for the purpose of recording peak stages continued to be the primary phase of work. To insure proper gage operation, periodic visits were made to service the gages and record the peak stages that had occurred between visits. Changes in channel, culvert, and control conditions were also noted. Additional visits were necessary during the spring snowmelt period to determine the effects of backwater caused by snow and ice in the stream channels. Extra visits were necessary during flood periods to measure high flows or to flag high-water marks along the stream channel for future transit-stadia surveys. These surveys provided the field data necessary for the computation of peak discharge by indirect methods when actual discharge measurements were not available.

During the 1966 water year, 180 current-meter streamflow measurements were made to define stage-discharge relation curves at crest-stage gaging stations. Peak discharge computations were made at 9 stations located at highway culverts, and 13 transit-stadia surveys were run to obtain data for computing peak discharge by the slope-area method or some other type of indirect measurement computation.

A level circuit between the gage and several semi-permanent reference marks was run at each gage during the year. This is done each year to insure that all flood peaks at a station can

be adjusted to the same datum although a gage may be disturbed or destroyed.

The statewide flood-frequency analysis was started in April 1966, utilizing the peak-flow records collected through the 1965 water year. Only stations having 5 years or more of record were considered useable. Station flood-frequency curves were drawn and several basin characteristics were determined for use in the analysis.

Program Plans, 1967 Water Year

The collection of peak-flow data will continue as the principal activity during the year. Routine inspections, with special visits when necessary, will be made as in previous years.

The statewide flood-frequency analysis should be completed during the year. A concentrated effort will be made to supply as much useful information as possible to the Montana State Highway Commission at the earliest possible date.

Information on floods at points where gaging stations are not operated will be obtained where significant damage is reported or where the peak discharge may be hydrologically significant. The resources of the Geological Survey do not permit coverage of all reported events, and it is acknowledged that some may escape attention.

PRESENTATION OF DATA

All stations, active and discontinued, are described on pages 7 to 132 in a downstream order. Each station description includes the name, permanent station number (in parentheses following name), location, drainage area, period of record, type of gage, and altitude of gage. Following the description, the annual maximum gage height (or stage) and discharge (when available) is listed for each water year of record. The date given for each annual peak may not be exact but should be close to the actual day on which the peak flow occurred.

The annual peak discharges shown are preliminary figures and are subject to revision. If a peak discharge is listed as "not determined" it means that a peak discharge will be determined when the stage-discharge relation has been defined by discharge measurements. A listing of "unknown" means a reliable figure of peak discharge will never be available.

MISSOURI RIVER BASIN

1. Long Creek near Lakeview, Mont. (6-0114)

Location.--Lat $44^{\circ}43'$, long $112^{\circ}04'$, in SE $\frac{1}{4}$ sec.10, T.13 S., R.4 W., at bridge on county road, 15 miles northwest of Lakeview.

Drainage area.--33.9 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 12, 1959. Altitude of gage is 6,800 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Apr. 6, 1960	3.17	235
1961	Apr. 17, 1961	1.00	48
1962	Apr. 27, 1962	3.42	265
1963	June 14, 1963	1.54	83
1964	May 14, 1964	2.72	196
1965	Apr. 29, 1965	2.48	178
1966	Apr. 11, 1966	1.86	128

2. Red Rock River tributary near Monida, Mont. (6-0119)

Location.--Lat $44^{\circ}35'$, long $112^{\circ}15'$, in SE $\frac{1}{4}$ sec.30, T.14 S., R.5 W., at county road, 3 miles east of Monida.

Drainage area.--1.00 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 12, 1959. Altitude of gage is 6,750 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Apr. 6, 1960	--	a 3
1961	Apr. 17, 1961	b 1.08	a 2
1962	Apr. 19, 1962	b 2.74	a 15
1963	April 1963	-.01	1
1964	Apr. 29, 1964	b 3.20	a 10
1965	Apr. 24, 1965	b 3.76	a 2
1966	Apr. 12, 1966	b 3.58	a 5

a About.

b Backwater from ice.

3. Traux Creek near Lima, Mont. (6-0132)

Location.--Lat $44^{\circ}37'$, long $112^{\circ}34'$, in NW $\frac{1}{4}$ sec.15, T.14 S., R.8 W.,
at culvert 300 ft upstream from Interstate Highway 15 and U. S.
Highway 91, 2 miles southeast of Lima.

Drainage area.--2.77 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 12, 1959. Altitude of gage is
6,350 ft (from topographic map).

Annual maximum data.---

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	March 1960	0.24	Not determined
1961	Mar. 14, 1961	.35	Not determined
1962	Apr. 19, 1962	.85	Not determined
1963	March 1963	--	<1
1964	April 1964	.06	Not determined
1965	Apr. 1, 1965	.75	Not determined
1966	Mar. 29, 1966	-.71	<1

4. Muddy Creek near Dell, Mont. (6-0134)

Location.--Lat $44^{\circ}38'$, long $112^{\circ}48'$, in SW $\frac{1}{4}$ sec.3, T.14 S., R.10 W.,
half a mile upstream from mouth, 8 miles southwest of Dell.

Drainage area.--62.7 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 12, 1959. Altitude of gage
is 6,570 ft (from topographic map).

Annual maximum data.---

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	July 6, 1960	2.70	85
1961	Apr. 3, 1961	2.47	68
1962	Apr. 2, 1962	3.72	197
1963	June 7, 1963	1.22	14
1964	May 15, 1964	2.47	68
1965	Apr. 1, 1965	3.83	112
1966	Mar. 30, 1966	b 2.70	a 40

a About.

b Backwater from ice.

5. Sheep Creek below Muddy Creek, near Dell, Mont. (6-0135)

Location.--Lat $44^{\circ}39'$, long $112^{\circ}47'$, in SE $\frac{1}{4}$ sec.35, T.13 S., R.10 W.,
 $6\frac{1}{2}$ miles southwest of Dell.

Drainage area.--280 sq mi. At site in 1936, 293 sq mi.

Records available.--April to September 1936 and May 1946 to September 1953 (continuous record), June 1959 to

Gage.--Water-stage recorder re-installed June 24, 1959. Altitude of gage is 6,530 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1936	--	--	Unknown
1946	May 28, 1946	5.54	379
1947	June 9, 1947	5.66	349
1948	Aug. 1, 1948	5.49	369
1949	Apr. 12, 1949	6.02	477
1950	Apr. 1, 1950	5.68	406
1951	Aug. 4, 1951	4.82	234
1952	Apr. 18, 1952	7.72	909
1953	June 2, 1953	5.23	313
1960	Mar. 26, 1960	4.44	168
1961	Apr. 4, 1961	3.98	84
1962	Apr. 2, 1962	4.83	236
1963	June 15, 1963	5.38	343
1964	June 10, 1964	6.06	491
1965	Apr. 21, 1965	5.43	354
1966	Apr. 2, 1966	4.59	195

6. Sage Creek tributary near Dell, Mont. (6-0139)

Location.--Lat $44^{\circ}44'$, long $112^{\circ}37'$, in SE $\frac{1}{4}$ sec.31, T.12 S., R.8W.,
at bridge on county road, 4 miles east of Dell.

Drainage area.--0.43 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 12, 1959. Altitude of gage
is 6,300 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	March 1960	b 0.13	<1
1961	September 1961	--	<1
1962	Apr. 2, 1962	b .92	Not determined
1963	March 1963	--	<1
1964	April 1964	b .50	<1
1965	April 1965	b .72	<1
1966	--	--	(c)

b Backwater from ice.

c No evidence of flow during year.

7. Grasshopper Creek near Dillon, Mont. (6-0155)

Location.--Lat $45^{\circ}07'$, long $112^{\circ}48'$, in NW $\frac{1}{4}$ sec.26, T.8 S., R.10 W., on left bank $1\frac{3}{4}$ miles upstream from mouth and 11 miles southwest of Dillon.

Drainage area.--348 sq mi.

Records available.--March 1921 to September 1929, April 1930 to June 1933, October 1945 to December 1953, March 1955 to September 1958, October 1959 to September 1961 (continuous record), October 1961 to

Gage.--Crest-stage gage installed Oct. 11, 1961. Water-stage recorder, chain or staff gages prior to October 1961. Altitude of gage is 5,350 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1921	June 10, 1921	6.60	d 516
1922	May 28, 1922	6.48	d 543
1923	June 23, 1923	5.68	d 283
1924	Apr. 13, 1924	5.05	d 120
1925	June 5, 1925	6.52	d 557
1926	July 8, 1926	5.52	d 197
1927	June 12, 1927	6.2	d 355
1928	May 13, 1928	6.10	d 327
1929	June 18, 1929	5.45	d 172
1930	--	--	Unknown
1931	Apr. 4, 1931	5.02	d 85
1932	June 7, 1932	6.06	d 322
1933	--	--	Unknown
1946	May 29, 1946	2.78	160
1947	Mar. 17, 1947	4.44	640
1948	June 4, 1948	4.51	719
1949	June 2, 1949	3.46	324
1950	June 23, 1950	3.22	252
1951	Mar. 22, 1951	4.11	559
1952	May 16, 1952	3.20	257
1953	June 3, 1953	4.51	719
1954	--	--	Unknown
1955	June 30, 1955	3.39	328
1956	Mar. 24, 1956	6.47	1,870
1957	May 21, 1957	3.75	433
1958	June 5, 1958	4.16	579
1959	--	--	Unknown
1960	Mar. 25, 1960	4.06	539
1961	June 14, 1961	3.14	252
1962	Mar. 27, 1962	3.83	450
1963	Feb. 3, 1963	b 4.61	465
1964	June 9, 1964	4.16	539
1965	July 1, 1965	4.82	635
1966	Mar. 30, 1966	3.02	180

b Backwater from ice.

d Maximum observed.

8. Beaverhead River tributary near Dillon, Mont. (6-0169)

Location.--Lat $45^{\circ}13'$, long $112^{\circ}40'$, in $SE\frac{1}{4}$ sec.15, T.7 S., R.9 W.,
250 ft upstream from settling basin, 2 miles west of Dillon.

Drainage area.--0.62 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 11, 1959. Altitude of gage
is 5,250 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 18, 1960	0.32	a 3
1961	--	--	(c)
1962	Feb. 2, 1962	.02	a 2
1963	Feb. 3, 1963	.20	a 11
1964	--	--	(c)
1965	Mar. 30, 1965	-.51	0.1
1966	Sept. 4, 1966	-.41	Not determined

9. Beaverhead River tributary No. 2 near Dillon, Mont. (6-0182)

Location.--Lat $45^{\circ}19'$, long $112^{\circ}32'$, in $NW\frac{1}{4}$ sec.13, T.6 S., R.8 W.,
at culvert on State Highway 41, 9 miles northeast of Dillon.

Drainage area.--0.40 sq mi.

Records available.--May 1959 to September 1965 (discontinued).

Gage.--Crest-stage gage installed May 7, 1959. Altitude of gage
is 4,970 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	e June 24, 1958	5.04	170
1959	--	--	(c)
1960	Mar. 19, 1960	.41	3
1961	June 12, 1961	.36	2.5
1962	--	--	(c)
1963	Sept. 2, 1963	.30	2
1964	June 27, 1964	.29	2
1965	August 1965	.40	3

a About.

c No evidence of flow during year.

e Prior to installation of gage; peak discharge computed from high-water marks along highway embankment at culvert.

10. Idaho Creek near Alder, Mont. (6-0198)

Location.--Lat $45^{\circ}12'$, long $112^{\circ}08'$, in center sec.30, T.7 S., R.4 W., at bridge on county road, 9 miles south of Alder.

Drainage area.--10.8 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 7, 1959. Altitude of gage is 5,420 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 27, 1960	b 2.18	a 40
1961	Apr. 4, 1961	.87	13
1962	Apr. 25, 1962	2.30	90
1963	Mar. 22, 1963	1.36	24
1964	July 29, 1964	1.20	17
1965	Mar. 30, 1956	b 3.01	a 60
1966	June 10, 1966	.80	8

11. Moose Creek near Divide, Mont. (6-0253)

Location.--Lat $45^{\circ}43'$, long $112^{\circ}42'$, in NW $\frac{1}{4}$ sec.34, T.1 S., R.9 W., at culverts on Interstate Highway 15 and U. S. Highway 91, $3\frac{1}{2}$ miles southeast of Divide.

Drainage area.--41.4 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 11, 1959. Altitude of gage is 5,430 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	May 7, 1960	1.62	90
1961	Apr. 4, 1961	.79	39
1962	Apr. 19, 1962	1.89	108
1963	May 22, 1963	2.66	165
1964	June 8, 1964	1.41	77
1965	June 17, 1965	2.06	122
1966	Mar. 30, 1966	1.20	64

a About.

b Backwater from ice.

12. Fish Creek near Silverstar, Mont. (6-0277)

Location.--Lat $45^{\circ}46'$, long $112^{\circ}15'$, in NW $\frac{1}{4}$ sec.8, T.1 S., R.5 W.,
at bridge on county road, 6 miles north of Silverstar.

Drainage area.--39.5 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 7, 1959. Altitude of gage is
4,790 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	June 6, 1959	1.15	166
1960	May 13, 1960	.91	105
1961	Apr. 4, 1961	1.13	160
1962	June 3, 1962	.95	115
1963	June 11, 1963	1.16	141
1964	June 19, 1964	b 1.49	150
1965	June 16, 1965	1.74	220
1966	May 2, 1966	.67	54

13. Jefferson River tributary near Whitehall, Mont. (6-0302)

Location.--Lat $45^{\circ}53'$, long $112^{\circ}00'$, in SE $\frac{1}{4}$ sec.32, T.2 N., R.3 W.,
at culvert on Interstate Highway 90 and U. S. Highway 10, 5 miles
east of Whitehall.

Drainage area.--1.85 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 6, 1959. Altitude of gage
is 4,340 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	--	--	(c)
1961	--	--	(c)
1962	Aug. 29, 1962	a 0.2	3
1963	Feb. 2, 1963	1.03	17
1964	Aug. 19, 1964	.97	16
1965	Aug. 22, 1965	1.21	22
1966	--	--	(c)

a About.

b Backwater from ice or debris.

c No evidence of flow during year.

14. Jefferson River tributary No. 2
near Whitehall, Mont. (6-0303)

Location.--Lat $45^{\circ}53'$, long $111^{\circ}59'$, in SE $\frac{1}{4}$ sec.33, T.2 N., R.3 W.,
at culvert on State Secondary Highway 281, 6 miles east of
Whitehall.

Drainage area.--4.50 sq mi.

Records available.--October 1957 to

Gage.--Crest-stage gage installed May 7, 1959. Altitude of gage
is 4,400 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	e June 24, 1958	4.45	169
1959	e Apr. 6, 1959	2.37	71
1960	--	--	(c)
1961	Sept. 11, 1961	1.32	34
1962	--	--	(c)
1963	Feb. 2, 1963	1.38	39
1964	June 8, 1964	0.41	10
1965	Aug. 22, 1965	.30	8
1966	--	--	(c)

15. Sand Creek at Sappington, Mont. (6-0347)

Location.--Lat $45^{\circ}47'$, long $111^{\circ}45'$, in SW $\frac{1}{4}$ sec.32, T.1 N., R.1 W.,
three quarters of a mile southeast of Sappington.

Drainage area.--9.41 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 6, 1959. Altitude of gage is
4,240 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Apr. 9, 1960	1.36	50
1961	Aug. 14, 1961	(OG) 2.0	124
1962	Aug. 25, 1962	5.4	2,130
1963	Feb. 3, 1963	2.73	380
1964	--	--	(c)
1965	Aug. 22, 1965	1.16	105
1966	July 3, 1966	.87	80

c No evidence of flow during year.
e Prior to installation of gage.

16. Jefferson River tributary No. 3
near Sappington, Mont. (6-0348)

Location.--Lat $45^{\circ}50'$, long $111^{\circ}42'$, in SW $\frac{1}{4}$ sec.14, T.1 N., R.1 W.,
at culvert on Interstate Highway 90 and U. S. Highway 10, 4
miles northeast of Sappington.

Drainage area.--1.14 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 6, 1959. Altitude of gage is
4,200 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Feb. 1, 1960	0.10	0.1
1961	Aug. 14, 1961	.95	12
1962	Mar. 6, 1962	.65	6
1963	Feb. 2, 1963	b 3.43	a 50
1964	--	--	(c)
1965	April 1965	0.16	<0.5
1966	July 3, 1966	4.09	96

17. Jefferson River tributary No. 4
near Three Forks, Mont. (6-0366)

Location.--Lat $45^{\circ}54'$, long $111^{\circ}37'$, in SW $\frac{1}{4}$ sec.28, T.2 N., R.1 E.,
at culverts on Interstate Highway 90 and U. S. Highway 10, 3
miles west of Three Forks.

Drainage area.--0.53 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 6, 1959. Altitude of gage
is 4,140 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	--	--	(c)
1961	--	--	(c)
1962	Mar. 6, 1962	b 0.75	a 3
1963	Feb. 2, 1963	.74	a 7
1964	Aug. 19, 1964	.62	a 6
1965	February 1965	.18	a 1.5
1966	July 3, 1966	.73	7

a About.

b Backwater from ice.

c No evidence of flow during year.

18. Jefferson River tributary No. 5
near Three Forks, Mont. (6-0367)

Location.--Lat $45^{\circ}55'$, long $111^{\circ}36'$, in NE $\frac{1}{4}$ sec.21, T.2 N., R.1 E.,
at culvert on State Highway 287, 3 miles west of Three Forks.

Drainage area.--3.69 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 6, 1959. Altitude of gage is
4,120 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	--	--	(c)
1961	--	--	(c)
1962	Mar. 6, 1962	0.61	28
1963	Feb. 2, 1963	.61	28
1964	--	--	(c)
1965	Aug. 22, 1965	2.56	153
1966	July 3, 1966	-0.04	6

19. Squaw Creek near Gallatin Gateway, Mont. (6-0432)

Location.--Lat $45^{\circ}26'$, long $111^{\circ}13'$, in SW $\frac{1}{4}$ sec.34, T.4 S., R.4 E.,
at private bridge, 10 miles south of Gallatin Gateway.

Drainage area.--40.4 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 5, 1959. Altitude of gage is
5,400 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	June 7, 1959	2.20	a 420
1960	May 12, 1960	1.66	147
1961	May 26, 1961	1.47	200
1962	June 13, 1962	1.34	168
1963	June 15, 1963	1.49	208
1964	June 8, 1964	1.44	195
1965	June 15, 1965	1.87	320
1966	May 6, 1966	1.08	136

a About.

c No evidence of flow during year.

20. Logger Creek near Gallatin Gateway, Mont. (6-0433)

Location.--Lat $45^{\circ}27'$, long $111^{\circ}14'$, in SW $\frac{1}{4}$ sec.28, T.4 S., R.4 E., at culvert on U. S. Highway 191, 10 miles south of Gallatin Gateway.

Drainage area.--2.48 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 5, 1959. Altitude of gage is 5,340 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	June 7, 1959	1.03	20
1960	May 12, 1960	.69	9
1961	May 26, 1961	.34	6
1962	June 13, 1962	.73	18
1963	May 27, 1963	.38	11
1964	June 8, 1964	1.09	25
1965	June 15, 1965	.66	18
1966	May 6, 1966	.08	5

21. East Gallatin River near Bozeman, Mont. (6-0465)

Location.--Lat $45^{\circ}38'35''$, long $110^{\circ}55'35''$, in SE $\frac{1}{4}$ sec.24, T.2 S., R.6 E., 6 miles east of Bozeman.

Drainage area.--49.0 sq mi.

Records available.--November 1951 to September 1953 (continuous record), 1956-57 (miscellaneous measurements only), May 1959 to

Gage.--Water-stage recorder re-installed May 5, 1959. Datum of gage is 5,044.1 ft above mean sea level, datum of 1929 (unadjusted).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1952	Apr. 19, 1952	4.08	421
1953	June 3, 1953	4.65	608
1959	Apr. 1, 1959	3.9	337
1960	May 8, 1960	3.64	248
1961	May 2, 1961	3.03	90
1962	Apr. 16, 1962	3.42	285
1963	Apr. 27, 1963	4.11	400
1964	May 17, 1964	3.65	212
1965	May 15, 1965	3.83	345
1966	Mar. 31, 1966	b 3.34	a 250

a About.

b Backwater from ice.

22. Pitcher Creek near Bozeman, Mont. (6-0467)

Location.--Lat $45^{\circ}39'$, long $110^{\circ}56'$, in NW $\frac{1}{4}$ sec.24, T.2 S., R.6 E., at culvert on county road, 5 miles east of Bozeman.

Drainage area.--2.33 sq mi.

Records available.--1951-53, miscellaneous measurements of base flow only. May 1959 to

Gage.--Crest-stage gage installed May 6, 1959. Altitude of gage is 5,040 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	May 13, 1960	1.25	14
1961	May 27, 1961	.03	1
1962	Apr. 24, 1962	.89	9
1963	Apr. 27, 1963	1.16	13
1964	May 17, 1964	.97	10
1965	May 16, 1965	2.10	19
1966	June 10, 1966	.73	7

23. Bear Canyon Creek near Bozeman, Mont. (6-0470)

Location.--Lat $45^{\circ}37'35''$, long $110^{\circ}55'45''$, in NW $\frac{1}{4}$ sec.36, T.2 S., R.6 E., 6 miles southeast of Bozeman.

Drainage area.--17.0 sq mi.

Records available.--November 1951 to September 1953 (continuous record), May 1959 to

Gage.--Water-stage recorder re-installed May 5, 1959. Datum of gage is 5,183.4 ft above mean sea level, datum of 1929 (unadjusted).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1952	May 26, 1952	2.84	149
1953	June 3, 1953	3.40	450
1959	May 1, 1959	2.2	a 150
1960	May 12, 1960	2.62	202
1961	May 22, 1961	1.77	46
1962	July 14, 1962	2.74	175
1963	May 9, 1963	2.43	110
1964	May 20, 1964	2.56	134
1965	May 16, 1965	2.61	145
1966	May 10, 1966	2.26	82

a About.

24. Castle Creek tributary near Ringling, Mont. (6-0562)

Location.--Lat $46^{\circ}22'$, long $111^{\circ}06'$, in NE $\frac{1}{4}$ sec.21, T.7 N., R.5 E., at culverts on U. S. Highway 12, 15 miles northwest of Ringling.

Drainage area.--2.59 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 22, 1959. Altitude of gage is 5,400 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	May 4, 1960	1.45	23
1961	Apr. 25, 1961	.91	12
1962	Apr. 19, 1962	2.74	28
1963	Feb. 4, 1963	.81	11
1964	May 1, 1964	2.99	35
1965	May 1, 1965	2.88	27
1966	May 3, 1966	1.03	12

25. Cabin Creek near Townsend, Mont. (6-0563)

Location.--Lat $46^{\circ}20'$, long $111^{\circ}13'$, in NW $\frac{1}{4}$ sec.27, T.7 N., R.4 E., 100 ft upstream from mouth, $14\frac{1}{2}$ miles east of Townsend.

Drainage area.--12.6 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 22, 1959. Altitude of gage is 4,900 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	June 4, 1960	2.00	Not determined
1961	June 22, 1961	.14	2
1962	May 22, 1962	.37	8
1963	June 21, 1963	.53	13
1964	May 19, 1964	1.37	38
1965	June 2, 1965	1.08	17
1966	May 5, 1966	1.05	14

26. Deep Creek below North Fork Deep Creek, near Townsend, Mont.
(6-0566)

Location.--Lat $46^{\circ}20'$, long $111^{\circ}17'$, in $SE\frac{1}{4}$ sec.25, T.7 N., R.3 E.,
at bridge on county road, 11 miles east of Townsend.

Drainage area.--87.7 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 18, 1959. Altitude of gage is
4,510 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	June 7, 1959	2.15	290
1960	June 4, 1960	2.00	254
1961	May 24, 1961	1.60	83
1962	May 22, 1962	1.66	175
1963	June 2, 1963	1.89	170
1964	May 18, 1964	2.33	329
1965	May 1, 1965	1.98	216
1966	May 5, 1966	2.13	290

27. Mitchell Gulch near East Helena, Mont. (6-0587).

Location.--Lat $46^{\circ}34'$, long $111^{\circ}49'$, in $NW\frac{1}{4}$ sec.2, T.9 N., R.2 W.,
at culvert on U. S. Highway 12, 4.7 miles east of East Helena.

Drainage area.--8.09 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 14, 1959. Altitude of gage is
4,060 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	e March 1959	0.96	53
1960	Mar. 19, 1960	.32	6
1961	June 29, 1961	.27	2
1962	Mar. 20, 1962	.43	12
1963	Feb. 4, 1963	1.41	107
1964	--	--	(c)
1965	Apr. 1, 1965	.62	28
1966	Mar. 10, 1966	.93	50

c No evidence of flow during year.

e Prior to installation of gage.

28. Jackson Creek near East Helena, Mont. (6-0617)

Location.--Lat $46^{\circ}28'20''$, long $111^{\circ}51'10''$, in SE $\frac{1}{4}$ sec.4, T.8 N., R.2 W., 300 ft upstream from mouth, 8 $\frac{1}{2}$ miles southeast of East Helena.

Drainage area.--3.44 sq mi.

Records available.--June 1960 to

Gage.--Staff gage installed June 22, 1960, and crest-stage gage installed July 8, 1960. Altitude of gage is 4,990 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	--	--	Unknown
1961	May 1, 1961	1.48	4
1962	June 2, 1962	2.49	16
1963	June 4, 1963	2.21	12
1964	June 8, 1964	2.64	19
1965	June 25, 1965	2.34	14
1966	May 10, 1966	1.97	7

29. Crystal Creek near East Helena, Mont. (6-0618)

Location.--Lat $46^{\circ}29'00''$, long $111^{\circ}51'40''$, in NW $\frac{1}{4}$ sec.4, T.8 N., R.2 W., a quarter of a mile upstream from mouth, 8 miles southeast of East Helena.

Drainage area.--3.77 sq mi.

Records available.--June 1960 to

Gage.--Staff gage installed June 22, 1960, and crest-stage gage installed July 8, 1960. Altitude of gage is 4,860 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	--	--	Unknown
1961	May 1, 1961	1.59	a 5
1962	June 2, 1962	1.55	11
1963	June 4, 1963	1.26	4
1964	June 8, 1964	1.64	21
1965	June 25, 1965	1.46	14
1966	May 10, 1966	1.32	9

30. McClellan Creek at City Diversion Dam,
near East Helena, Mont. (6-0619)

Location.--Lat $46^{\circ}32'00''$, long $111^{\circ}52'40''$, in SE $\frac{1}{4}$ sec.17, T.9 N., R.2 W., 300 ft upstream from diversion dam, $\frac{1}{2}$ miles southeast of East Helena.

Drainage area.--33.2 sq mi.

Records available.--June 1960 to

Gage.--Staff gage installed June 23, 1960, and crest-stage gage installed July 7, 1960. Altitude of gage is 4,200 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	e May-June 1960	3.01	120
1961	May 27, 1961	.65	48
1962	June 2, 1962	1.48	175
1963	May 26, 1963	.95	87
1964	June 8, 1964	2.59	390
1965	June 25, 1965	1.72	220
1966	May 11, 1966	.93	85

31. Little Porcupine Creek tributary
near Helena, Mont. (6-0627)

Location.--Lat $46^{\circ}35'$, long $112^{\circ}16'$, in SW $\frac{1}{4}$ sec.29, T.10 N., R.5 W., at culvert on U. S. Highway 12, 11 miles west of Helena.

Drainage area.--0.48 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 14, 1959. Altitude of gage is 5,360 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	June 6, 1959	0.45	1.5
1960	May 12, 1960	.39	1.2
1961	May 22, 1961	.17	.4
1962	June 2, 1962	.49	1.7
1963	May 20, 1963	.57	2.2
1964	June 8, 1964	1.17	5.9
1965	May 1, 1965	.60	3.0
1966	May 7, 1966	.28	1.4

e Prior to installation of gage.

32. Lyons Creek near Wolf Creek, Mont. (6-0712)

Location.--Lat $46^{\circ}56'$, long $112^{\circ}08'$, in NE $\frac{1}{4}$ sec.29, T.14 N., R.4 W.,
135 ft upstream from mouth, $5\frac{1}{2}$ miles southwest of Wolf Creek.

Drainage area.--29.4 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 15, 1959. Altitude of gage is
3,730 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	June 6, 1959	0.81	63
1960	June 2, 1960	.81	63
1961	May 28, 1961	.12	13
1962	May 22, 1962	1.57	158
1963	Feb. 4, 1963	1.3	120
1964	June 8, 1964	3.80	490
1965	Apr. 22, 1965	1.55	155
1966	May 11, 1966	.69	41

33. Dog Creek near Craig, Mont. (6-0714)

Location.--Lat $47^{\circ}05'$, long $112^{\circ}00'$, in NW $\frac{1}{4}$ sec.4, T.15 N., R.3 W.,
at bridge on county road, 2 miles west of Craig.

Drainage area.--15.9 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 15, 1959. Altitude of gage
is 3,660 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 19, 1960	0.41	a 30
1961	May 30, 1961	4.40	1,160
1962	Mar. 17, 1962	2.42	114
1963	Feb. 3, 1963	2.05	70
1964	June 8, 1964	1.97	65
1965	Feb. 17, 1965	2.99	200
1966	Mar. 10, 1966	3.11	230

34. Wegner Creek at Craig, Mont. (6-0716)

Location.--Lat $47^{\circ}05'$, long $111^{\circ}57'$, in NW $\frac{1}{4}$ sec.11, T.15 N., R.3 W., at bridge on Interstate Highway 15 and U. S. Highway 91, 0.9 mile east of Craig.

Drainage area.--35.0 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 15, 1959. Altitude of gage is 3,450 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	June 2, 1960	0.59	46
1961	July 6, 1961	2.54	408
1962	Apr. 19, 1962	.33	24
1963	Feb. 3, 1963	.67	48
1964	May 6, 1964	1.84	280
1965	Mar. 31, 1965	1.11	125
1966	July 1, 1966	4.64	1,020

35. Five Mile Creek near White Sulphur Springs, Mont. (6-0756)

Location.--Lat $46^{\circ}37'$, long $110^{\circ}45'$, in SW $\frac{1}{4}$ sec.20, T.10 N., R.8 E., at culvert on U. S. Highway 12, 8 miles northeast of White Sulphur Springs.

Drainage area.--6.00 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 22, 1959. Altitude of gage is 5,380 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	May 1, 1960	1.25	9
1961	--	--	(c)
1962	Mar. 27, 1962	1.38	11
1963	Feb. 4, 1963	2.06	a 20
1964	June 8, 1964	1.16	8
1965	April 1965	1.86	17
1966	Mar. 30, 1966	b 3.34	a 15

a About.

b Backwater from ice

c No evidence of flow during year.

36. Newland Creek near White Sulphur Springs, Mont. (6-0760)

Location.--Lat $46^{\circ}44'$, long $110^{\circ}50'$, near line between secs. 9 and 10, T.11 N., R.7 E., 15 miles upstream from mouth, 13 miles north of White Sulphur Springs.

Drainage area.-- 6.74 sq mi.

Records available.--September 1945 to November 1953 (continuous record), June 1959 to

Gage.--Water-stage recorder re-installed June 19, 1959. Altitude of gage is 5,590 ft (by barometer).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1946	June 11, 17, 1946	0.72	d 4.9
1947	May 6, 1947	2.18	18
1948	May 8, 1948	2.64	29
1949	June 1, 1949	1.48	6.2
1950	May 28, 1950	1.64	9.5
1951	May 13, 1951	1.62	11
1952	May 4, 1952	1.66	14
1953	June 4, 1953	3.50	56
1960	May 19, 1960	2.39	5.1
1961	May 31, 1961	2.18	3.2
1962	May 29, 1962	2.68	15
1963	June 26, 1963	2.53	11
1964	May 17, 1964	3.16	37
1965	May 17, 1965	3.14	36
1966	May 10, 1966	2.53	11

d Maximum observed.

37. Sheep Creek near Neihart, Mont. (6-0767)

Location.--Lat $46^{\circ}48'$, long $110^{\circ}42'$, in SE $\frac{1}{4}$ sec.15, T.12 N., R.8 E.,
at culvert on U. S. Highway 89, 10 miles south of Neihart.

Drainage area.--5.30 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 22, 1959. Altitude of gage
is 6,600 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	May 12, 1960	1.12	38
1961	May 27, 1961	1.11	37
1962	May 21, 1962	1.37	49
1963	June 2, 1963	1.08	39
1964	June 8, 1964	2.12	113
1965	June 16, 1965	2.40	138
1966	May 10, 1966	1.27	50

38. Nugget Creek near Neihart, Mont. (6-0768)

Location.--Lat $46^{\circ}47'$, long $110^{\circ}42'$, in NE $\frac{1}{4}$ sec.27, T.12 N., R.8 E.,
at culvert on U. S. Highway 89, 11 miles south of Neihart.

Drainage area.--1.48 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 22, 1959. Altitude of gage
is 6,400 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	June 7, 1959	1.05	14
1960	May 12, 1960	.38	5
1961	May 27, 1961	.30	4
1962	May 25, 1962	.50	6
1963	June 2, 1963	.50	6
1964	May 21, 1964	1.07	15
1965	June 16, 1965	1.13	12
1966	May 10, 1966	.68	8

39. Smith River tributary near Eden, Mont. (6-0777)

Location.--Lat $48^{\circ}18'$, long $111^{\circ}26'$, in SW $\frac{1}{4}$ sec.13, T.18 N., R.2 E.,
at bridge on county road, $7\frac{1}{2}$ miles northwest of Eden.

Drainage area.--1.63 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 25, 1959. Altitude of gage is
3,420 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 17, 1960	0.32	1.8
1961	--	--	(c)
1962	June 15, 1962	.72	4.5
1963	Feb. 2, 1963	.67	4.0
1964	May 3, 1964	.30	1.7
1965	July 30, 1965	1.24	a 9
1966	Mar. 8, 1966	.91	a 15

40. Goodman Coulee near Eden, Mont. (6-0778)

Location.--Lat $47^{\circ}20'$, long $111^{\circ}25'$, in center sec.12, T.18 N., R.2 E.,
at culvert on county road, 8 miles northwest of Eden.

Drainage area.--21.8 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 25, 1959. Altitude of gage
is 3,370 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	e Apr. 22, 1959	1.57	49
1960	May 1, 1960	1.92	41
1961	--	--	(c)
1962	Mar. 19, 1962	4.17	127
1963	Feb. 4, 1963	2.30	55
1964	May 3, 1964	5.73	150
1965	July 30, 1965	3.80	117
1966	Mar. 8, 1966	6.73	437

a About.

c No evidence of flow during year.

e Prior to installation of gage; peak discharge computed from high-water marks along highway embankment at culvert.

41. Beaver Creek at Gibson Dam, near Augusta, Mont. (6-0796)

Location.--Lat $47^{\circ}36'$, long $112^{\circ}45'$, in SE $\frac{1}{4}$ sec.4, T.21 N., R.9 W., at bridge on county road, 19 miles northwest of Augusta.

Drainage area.--20.3 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 28, 1959. Altitude of gage is 4,560 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	June 6, 1959	0.78	110
1960	May 12, 1960	2.28	458
1961	May 7, 1961	.37	55
1962	May 26, 1962	2.45	496
1963	May 25, 1963	.85	122
1964	June 8, 1964	--	4,360
1965	June 11, 1965	.71	75
1966	May 29, 1966	.41	40

42. Muddy Creek tributary near Power, Mont. (6-0879)

Location.--Lat $47^{\circ}45'$, long $111^{\circ}43'$, on south line of SW $\frac{1}{4}$ sec.10., T.23 N., R.1 W., at culvert on county road, 3 miles west of U. S. Highway 91, 3 $\frac{1}{2}$ miles northwest of Power, and 6 miles south of Dutton.

Drainage area.--3.15 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 16, 1963. Altitude of gage is 3,710 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	July 10, 1963	1.15	19
1964	May 3, 1964	2.26	284
1965	June 17, 1965	2.27	130
1966	July 2, 1966	5.41	620

43. Sun River tributary near Great Falls, Mont. (6-0893)

Location.--Lat 47°32', long 111°24', in SW $\frac{1}{4}$ sec.31, T.21 N., R.3 E., at culvert on old U. S. Highways 89 and 91, 4 miles northwest of Great Falls.

Drainage area.--21.1 sq mi.

Records available.--August 1955 to

Gage.--Crest-stage gage installed Aug. 15, 1955. Altitude of gage is 3,330 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	Mar. 20, 1956	1.20	1
1957	June 16, 1957	1.05	.1
1958	July 3, 1958	2.74	156
1959	Mar. 2, 1959	2.52	116
1960	May 23, 1960	1.28	6
1961	--	--	(c)
1962	May 21, 1962	3.06	a 150
1963	July 5, 1963	1.64	18
1964	June 8, 1964	5.46	470
1965	June 26, 1965	4.39	280
1966	Mar. 9, 1966	3.54	165

44. Middle Fork Dry Fork Marias River near Dupuyer, Mont. (6-0997)

Location.--Lat 48°09', long 112°28', in NE $\frac{1}{4}$ sec.35, T.28 N., R.7 W., at culvert on county road, 4 miles southeast of Dupuyer.

Drainage area.--20.2 sq mi.

Records available.--May 1959 to . Prior to 1964, published as North Fork Dry Fork Marias River near Dupuyer.

Gage.--Crest-stage gage installed May 28, 1959. Altitude of gage is 4,120 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 17, 1960	b 1.24	a 70
1961	May 7, 1961	.29	10
1962	Mar. 19, 1962	.99	61
1963	Feb. 3, 1963	b 2.11	a 45
1964	June 8, 1964	6.56	4,240
1965	Feb. 20, 1965	4.87	a 300
1966	Mar. 26, 1966	2.22	100

a About.

b Backwater from ice.

c No evidence of flow during year.

45. Heines Coulee tributary near Valier, Mont. (6-1002)

Location.--Lat $48^{\circ}15'$, long $112^{\circ}14'$, in NE $\frac{1}{4}$ sec.27, T.29 N., R.5 W., at culvert on county road, 4 miles south of Valier.

Drainage area.--0.60 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 27, 1959. Altitude of gage is 3,860 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	May 1, 1960	0.92	9
1961	May 17, 1961	.54	4
1962	Jan. 29, 1962	b .41	a 2
1963	--	--	(c)
1964	June 8, 1964	10.57	64
1965	June 15, 1965	1.00	6
1966	Mar. 26, 1966	1.05	7

46. Lone Man Coulee near Valier, Mont. (6-1003)

Location.--Lat $48^{\circ}14'$, long $112^{\circ}14'$, in SE $\frac{1}{4}$ sec.27, T.29 N., R.5 W., at culvert on county road, 5 miles south of Valier.

Drainage area.--14.1 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 27, 1959. Altitude of gage is 3,780 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	May 1, 1960	0.58	32
1961	May 17, 1961	.36	22
1962	Jan. 29, 1962	b 2.87	a 15
1963	Aug. 19, 1963	.49	27
1964	June 8, 1964	2.38	1,740
1965	Feb. 17, 1965	1.38	400
1966	Mar. 9, 1966	--	140

a About.

b Backwater from ice.

c No evidence of flow during year.

47. Marias River tributary No. 3 near Chester, Mont. (6-1016)

Location.--Lat $48^{\circ}14'$, long $110^{\circ}53'$, in NE $\frac{1}{4}$ sec.36, T.29 N., R.6E., at culvert on State Secondary Highway 223, 2.1 miles south of Marias River bridge and 20 miles southeast of Chester.

Drainage area.--0.32 sq mi.

Records available.--May 1962 to

Gage.--Crest-stage gage installed Apr. 18, 1963. Altitude of gage is 2,900 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e May 21, 1962	3.18	29
1963	July 4, 1963	1.20	9
1964	June 8, 1964	1.37	11
1965	June 17, 1965	1.67	14
1966	June 4, 1966	.48	4

48. Cottonwood Creek tributary near Chester, Mont. (6-1017)

Location.--Lat $48^{\circ}27'$, long $111^{\circ}05'$, near center of east line of sec.9, T.31 N., R.5 E., at culvert on county road $3\frac{1}{2}$ miles south of Tiber Siding on Great Northern Railway and U. S. Highway 2, $6\frac{1}{2}$ miles southwest of Chester.

Drainage area.--2.28 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 17, 1963. Altitude of gage is 3,100 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	June 28, 1963	4.08	99
1964	June 8, 1964	.98	a 10
1965	Apr. 10, 1965	3.34	67
1966	July 3, 1966	1.61	21

a About.

e Prior to installation of gage.

49. Cottonwood Creek tributary No. 2 near Chester, Mont. (6-1018)

Location.--Lat $48^{\circ}20'$, long $110^{\circ}57'$, in NW $\frac{1}{4}$ sec.27, T.30 N., R.6 E., at bridge on State Secondary Highway 223, $5\frac{1}{2}$ road miles north of Marias River bridge, and $12\frac{1}{2}$ miles south of Chester.

Drainage area.--24.6 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 17, 1963. Altitude of gage is 2,950 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	--	--	(c)
1964	June 8, 1964	2.35	75
1965	Apr. 7, 1965	3.18	220
1966	July 3, 1966	2.70	130

50. Dead Indian Coulee near Fort Benton, Mont. (6-1019)

Location.--Lat $48^{\circ}05'$, long $110^{\circ}50'$, in center of sec.21, T.27 N., R.7 E., at culvert on State Secondary Highway 223, 20 miles northwest of Fort Benton.

Drainage area.--2.73 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 18, 1963. Altitude of gage is 3,250 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	--	--	(c)
1964	May 3, 1964	2.19	22
1965	Feb. 17, 1965	4.16 (revised)	52 (revised)
1966	Mar. 9, 1966	4.95	116

c No evidence of flow during year.

51. Dry Fork Coulee tributary near Loma, Mont. (6-1021)

Location.--Lat $47^{\circ}57'$, long $110^{\circ}33'$, in SW $\frac{1}{4}$ sec.2, T.25 N., R.9 E.,
at culvert on county road, 2 miles west of Loma.

Drainage area.--0.84 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 25, 1959. Altitude of gage
is 2,580 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	e Mar. 1, 1959	4.02	71
1960	Mar. 17, 1960	.41	a 2
1961	May 31, 1961	b 1.42	a 1
1962	May 21, 1962	.85	6
1963	Aug. 25, 1963	1.54	16
1964	Aug. 19, 1964	1.06	8
1965	June 24, 1965	7.23	244
1966	June 3, 1966	3.27	54

52. Marias River tributary at Loma, Mont. (6-1022)

Location.--Lat $47^{\circ}57'$, long $110^{\circ}31'$, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.25 N., R.9 E.,
at bridge on county road, five eighths of a mile west of Loma.

Drainage area.--1.62 sq mi.

Records available.--August 1955 to

Gage.--Crest-stage gage installed Aug. 18, 1955. Altitude of gage
is 2,590 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	1956	b 0.8	a 5
1957	Mar. 1, 1957	b 1.74	a 3
1958	Mar. 29, 1958	.68	a 4
1959	Mar. 1, 1959	b 2.9	a 12
1960	Mar. 17, 1960	1.50	a 6
1961	--	--	(c)
1962	May 21, 1962	2.11	a 20
1963	Feb. 4, 1963	b 1.88	a 10
1964	Aug. 19, 1964	b 1.58	a 8
1965	June 24, 1965	4.87	300
1966	June 3, 1966	2.43	82

a About.

b Backwater from ice.

c No evidence of flow during year.

e Prior to installation of gage.

53. Marias River tributary No. 2 at Loma, Mont. (6-1023)

Location.--Lat 47°57', long 110°30', in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.12, T.25 N., R.9 E., at culvert on approach to U. S. Highway 87, a quarter of a mile north of Loma.

Drainage area.--0.25 sq mi.

Records available.--August 1955 to

Gage.--Crest-stage gage installed Aug. 18, 1955. Altitude of gage is 2,590 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	May 27, 1956	2.97	a 20
1957	Mar. 1, 1957	b 2.46	a 10
1958	Mar. 29, 1958	b 1.40	a 1
1959	February 1959	1.01	a 1
1960	Mar. 17, 1960	b 1.73	a 2
1961	--	--	(c)
1962	Mar. 17, 1962	b 1.55	a 2
1963	June 28, 1963	2.60	a 15
1964	Aug. 19, 1964	1.38	2
1965	June 24, 1965	4.78	42
1966	June 3, 1966	2.85	18

54. Bruce Coulee tributary near Choteau, Mont. (6-1058)

Location.--Lat 47°44', long 112°15', near center of sec.21, T.23 N., R.5 W., at culvert on county road, 1.2 miles west of State Highway 287, 6 miles southwest of Choteau.

Drainage area.--1.70 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 16, 1963. Altitude of gage is 3,940 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	June 28, 1963	0.65	a 18
1964	June 8, 1964	1.76	148
1965	June 16, 1965	1.90	140
1966	July 2, 1966	3.50	247

a About.

b Backwater from ice.

c No evidence of flow during year.

55. Kinley Coulee near Dutton, Mont. (6-1082)

Location.--Lat 47°51', long 111°36', in center of north line of sec.15, T.24 N., R.1 E., at culverts on county road, 5.1 miles east of Dutton on Diamond Valley Road.

Drainage area.--9.67 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 17, 1963. Altitude of gage is 3,560 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	--	--	(c)
1964	June 21, 1964	8.0	364
1965	June 16, 1965	1.39	24
1966	July 2, 1966	10.72	2,070

56. Kinley Coulee tributary near Dutton, Mont. (6-1083)

Location.--Lat 47°51', long 111°33', on north line of NW $\frac{1}{4}$ sec.13, T.24 N., R.1 E., at culverts on county road, 6.5 miles east of Dutton on Diamond Valley Road.

Drainage area.--2.65 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 16, 1963. Altitude of gage is 3,610 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	Sept. 16, 1963	1.28	18
1964	June 8, 1964	2.98	76
1965	Mar. 31, 1965	1.43	7
1966	July 2, 1966	14.77	465

c No evidence of flow during year.

57. Judith River tributary near Utica, Mont. (6-1099)

Location.--Lat $46^{\circ}53'$, long $110^{\circ}16'$, in SW $\frac{1}{4}$ sec.13, T.13 N., R.11 E.,
at bridge on county road, 10 miles southwest of Utica.

Drainage area.--7.17 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 21, 1959. Altitude of gage is
5,100 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 18, 1960	0.65	Not determined
1961	--	--	(c)
1962	June 14, 1962	1.00	Not determined
1963	Feb. 4, 1963	b 3.33	Not determined
1964	--	--	(c)
1965	April 1965	2.46	83
1966	Mar. 10, 1966	2.06	Not determined

58. Judith River tributary No. 2 near Utica, Mont. (6-1099.5)

Location.--Lat $46^{\circ}54'$, long $110^{\circ}15'$, in SE $\frac{1}{4}$ sec.7, T.13 N., R.12 E.,
at bridge on county road, 9 $\frac{1}{2}$ miles southwest of Utica.

Drainage area.--6.97 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 21, 1959. Altitude of gage is
4,850 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 18, 1960	0.70	Not determined
1961	--	--	(c)
1962	June 14, 1962	.90	Not determined
1963	Feb. 4, 1963	1.00	Not determined
1964	June 8, 1964	1.29	Not determined
1965	April 1965	1.69	Not determined
1966	Mar. 10, 1966	.18	Not determined

b Backwater from ice.

c No evidence of flow during year.

59. Casino Creek tributary near Lewistown, Mont. (6-1117)

Location.--Lat $47^{\circ}00'$, long $109^{\circ}26'$, in NE $\frac{1}{4}$ sec.9, T.14 N., R.18 E., at culverts on county road, 5 miles south of Lewistown.

Drainage area.--3.53 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 21, 1959. Altitude of gage is 4,200 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 18, 1960	0.94	10
1961	--	--	(c)
1962	May 21, 1962	3.24	40
1963	May 12, 1963	.54	5
1964	May 3, 1964	3.67	44
1965	June 17, 1965	5.00	66
1966	Mar. 12, 1966	b 1.71	a 1

60. Cottonwood Creek near Moore, Mont. (6-1121)

Location.--Lat $46^{\circ}59'$, long $109^{\circ}29'$, in NW $\frac{1}{4}$ sec.18, T.14 N., R.18 E., 30 ft downstream from bridge on county road, 9 $\frac{1}{2}$ miles east of Moore, and 12 miles upstream from mouth.

Drainage area.--47.9 sq mi.

Records available.--August 1957 to September 1963 (continuous record), October 1963 to

Gage.--Water-stage recorder. Altitude of gage is 4,300 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	May 22, 1958	3.78	57
1959	June 7, 1959	5.42	143
1960	June 4, 1960	4.50	102
1961	June 1, 1961	4.83	101
1962	May 22, 1962	6.77	683
1963	June 15, 1963	4.75	216
1964	June 9, 1964	7.68	1,220
1965	June 17, 1965	4.52	162
1966	May 29, 1966	4.47	155

a About.

b Backwater from ice.

c No evidence of flow during year.

61. Missouri River tributary near Landusky, Mont. (6-1151)

Location.--Lat $47^{\circ}38'$, long $108^{\circ}42'$, in NW $\frac{1}{4}$ sec.31, T.22 N., R.24 E.,
at culvert on county road 0.4 mile west of U. S. Highway 191
along south side of Missouri River, 19 miles south of Landusky.

Drainage area.--3.39 sq mi.

Records available.--June 1962 to

Gage.--Crest-stage gage installed May 14, 1963. Altitude of gage
is 2,280 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e June 15, 1962	--	>500
1963	July 18, 1963	3.75	111
1964	May 3, 1964	.04	1
1965	May 7, 1965	1.07	20
1966	--	--	(c)

62. Duval Creek near Landusky, Mont. (6-1153)

Location.--Lat $47^{\circ}45'$, long $108^{\circ}42'$, in center of sec.13, T.23 N.,
R.23 E., at culvert on U. S. Highway 191, 10.0 road miles north
of the Fred L. Robinson Bridge over the Missouri River, 11 miles
southwest of Landusky.

Drainage area.--3.31 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 14, 1963. Altitude of gage
is 2,900 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	May 11, 1963	2.13	46
1964	Aug. 20, 1964	4.23	145
1965	May 7, 1965	6.30	280
1966	Apr. 26, 1966	2.14	47

c No evidence of flow during year.

e Prior to installation of gage.

63. Antelope Creek tributary near Harlowton, Mont. (6-1206)

Location.--Lat $46^{\circ}39'$, long $109^{\circ}58'$, in NE $\frac{1}{4}$ sec.8, T.10 N., R.14 E., at culvert on county road, 18.3 miles northwest of Harlowton.

Drainage area.--0.47 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 13, 1955. Altitude of gage is 5,400 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	June 15, 1956	1.36	13
1957	March 1957	.56	7
1958	--	--	(c)
1959	March 1959	1.72	3
1960	Mar. 18, 1960	2.04	6
1961	June 13, 1961	.25	(c)
1962	Mar. 26, 1962	1.40	1
1963	Feb. 4, 1963	1.32	1
1964	--	--	(c)
1965	April 1965	1.15	<1
1966	July 2, 1966	1.47	2

64. Antelope Creek tributary near mouth,
near Harlowton, Mont. (6-1207)

Location.--Lat $46^{\circ}37'$, long $109^{\circ}57'$, in NW $\frac{1}{4}$ sec.22, T.10 N., R.14 E., at bridge on county road, 16.3 miles northwest of Harlowton.

Drainage area.--1.92 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 12, 1955. Altitude of gage is 5,000 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	Mar. 17, 1956	1.60	207
1957	June 16, 1957	1.51	188
1958	May 23, 1958	.17	17
1959	Mar. 20, 1959	.75	65
1960	Mar. 18, 1960	.42	33
1961	--	--	(c)
1962	Mar. 26, 1962	.28	20
1963	Feb. 4, 1963	b 1.49	a 50
1964	March 1964	.54	a 45
1965	April 1965	1.40	165
1966	Mar. 20, 1966	.68	60

a About.

b Backwater from ice.

c No evidence of flow during year.

65. Antelope Creek tributary No. 2 near Harlowton, Mont. (6-1208)

Location.--Lat $46^{\circ}28'$, long $109^{\circ}49'$, in SE $\frac{1}{4}$ sec.10, T.8 N., R.15 E.,
at E. S. Bacon ranch, $1\frac{1}{2}$ miles north of Harlowton.

Drainage area.--21.2 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 13, 1955. Altitude of gage
is 4,250 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	June 15, 1956	3.51	820
1957	June 21, 1957	1.95	190
1958	June 1958	.36	35
1959	Mar. 20, 1959	.57	80
1960	--	(f)	<25
1961	--	(f)	<25
1962	June 16, 1962	5.56	3,230
1963	Feb. 4, 1963	b .61	a 20
1964	June 8, 1964	1.41	a 130
1965	June 12, 1965	3.79	922
1966	--	(f)	<50

66. Antelope Creek at Harlowton, Mont. (6-1209)

Location.--Lat $46^{\circ}26'$, long $109^{\circ}49'$, in NE $\frac{1}{4}$ sec.22, T.8 N., R.15 E.,
on overpass on U. S. Highway 12 at Harlowton.

Drainage area.--88.7 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 12, 1955. Altitude of gage
is 4,150 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1950	e June 17, 1950	16.73	24,400
1954	e Aug. 15, 1954	4.52	1,600
1955	e June 26, 1955	3.01	591
1956	June 15, 1956	3.28	800
1957	June 21, 1957	1.52	170
1958	--	(f)	<30
1959	--	(f)	<30
1960	--	(f)	<30
1961	--	(f)	<30
1962	June 16, 1962	4.02	1,280
1963	Feb. 4, 1963	(f)	<30
1964	--	(f)	<30
1965	June 12, 1965	2.2	318
1966	--	(f)	<30

a About.

b Backwater from ice.

e Prior to installation of gage.

f Peak discharge did not reach bottom of gage.

67. Currant Creek near Roundup, Mont. (6-1263)

Location.--Lat $46^{\circ}22'$, long $108^{\circ}39'$, in SW $\frac{1}{4}$ sec.7, T.7 N., R.25 E., at bridge on U. S. Highway 12, 7 miles southwest of Roundup.

Drainage area.--220 sq mi.

Records available.--May 1958 to

Gage.--Crest-stage gage installed May 9, 1958. Altitude of gage is 3,250 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	July 19, 1958	2.12	a 40
1959	Mar. 1, 1959	6.65	780
1960	--	--	Unknown
1961	July 21, 1961	1.86	31
1962	June 15, 1962	5.28	395
1963	June 5, 1963	b 3.45	a 20
1964	June 8, 1964	3.80	140
1965	Apr. 1, 1965	1.55	25
1966	July 3, 1966	2.02	37

68. South Willow Creek tributary near Roundup, Mont. (6-1271)

Location.--Lat $46^{\circ}31'$, long $108^{\circ}35'$, in center E $\frac{1}{2}$ sec.28, T.9 N., R.25 E., at culvert on U. S. Highway 87 between Roundup and Grass Range, $4\frac{1}{2}$ miles north of Roundup.

Drainage area.--1.38 sq mi.

Records available.--May 1962 to

Gage.--Crest-stage gage installed Apr. 28, 1963. Altitude of gage is 3,450 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	May 13, 1962	8.34	444
1963	--	--	(c)
1964	June 8, 1964	1.77	45
1965	July 27, 1965	9.90	510
1966	July 3, 1966	4.94	210

a About.

b Backwater from ice or debris.

c No evidence of flow during year.

69. Musselshell River tributary near Musselshell, Mont. (6-1272)

Location.--Lat $46^{\circ}30'$, long $108^{\circ}15'$, in SW $\frac{1}{4}$ sec.30, T.9 N., R.28 E., at bridge on U. S. Highway 12, 7.0 road miles east of Gage railroad siding, 2.0 miles west of road to Delphia, and 8 miles west of Musselshell.

Drainage area.--10.8 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 15, 1963. Altitude of gage is 3,070 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	--	--	(c)
1964	--	--	(c)
1965	April 1965	1.73	150
1966	Mar. 10, 1966	.96	22

70. Home Creek near Melstone, Mont. (6-1275.3)

Location.--Lat $46^{\circ}38'$, long $107^{\circ}47'$, in NE $\frac{1}{4}$ sec.14, T.10 N., R.31 E., at bridge on U. S. Highway 12, 2.2 miles east of Musselshell River bridge, 5 miles northeast of Melstone, and 11 miles west of Sumatra.

Drainage area.--31.2 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 16, 1963. Altitude of gage is 2,860 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	--	--	(c)
1964	--	--	(c)
1965	May 7, 1965	3.47	a 95
1966	July 13, 1966	5.98	252

a About.

c No evidence of flow during year.

71. Butts Coulee near Melstone, Mont. (6-1275.7)

Location.--Lat $46^{\circ}39'$, long $107^{\circ}49'$, in center $E\frac{1}{2}$ sec.9, T.10 N., R.31 E., at culvert on county road, 2.8 miles north of U. S. Highway 12, 4 miles northeast of Melstone.

Drainage area.--5.96 sq mi.

Records available.--May 1963 to . Prior to 1966, published as Musselshell River tributary No. 2 near Melstone.

Gage.--Crest-stage gage installed May 16, 1963. Altitude of gage is 2,810 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	May 11, 1963	2.67	64
1964	Aug. 20, 1964	3.53	100
1965	June 15, 1965	3.9	114
1966	Mar. 8, 1966	1.21	20

72. South Fork Bear Creek near Roy, Mont. (6-1284)

Location.--Lat $47^{\circ}12'$, long $108^{\circ}48'$, in $SW\frac{1}{4}$ sec.28, T.17 N., R.23 E., at bridge on State Highway 19, 10.2 miles south of U. S. Highway 191, 11.2 miles north of U. S. Highway 87 and State Highway 18, 12 miles southeast of Roy, and 12 miles north of Grass Range.

Drainage area.--39.6 sq mi.

Records available.--June 1962 to

Gage.--Crest-stage gage installed May 15, 1963. Altitude of gage is 3,250 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	June 15, 1962	2.67	Not determined
1963	May 11, 1963	1.37	Not determined
1964	June 8, 1964	5.05	1,490
1965	April 1965	2.55	Not determined
1966	July 3, 1966	2.86	Not determined

73. South Fork Bear Creek tributary near Roy, Mont. (6-1285)

Location.--Lat $47^{\circ}14'$, long $108^{\circ}48'$, in SW $\frac{1}{4}$ sec.16, T.17 N., R.23 E., at culvert on State Highway 19, 8.7 road miles south of U. S. Highway 191, 1.7 miles north of South Fork Bear Creek, $10\frac{1}{2}$ miles southeast of Roy, and 14 miles north of Grass Range.

Drainage area.--5.40 sq mi.

Records available.--June 1962 to

Gage.--Crest-stage gage installed May 14, 1963. Altitude of gage is 3,300 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	June 15, 1962	1.90	28
1963	June 25, 1963	.42	1
1964	July 5, 1964	2.88	63
1965	April 1965	2.78	59
1966	July 3, 1966	2.65	53

74. Box Elder Creek tributary near Winnett, Mont. (6-1289)

Location.--Lat $47^{\circ}01'$, long $108^{\circ}10'$, in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.34, T.15 N., R.28 E., a quarter of a mile north of State Highway 20 and 8 miles east of Winnett.

Drainage area.--16.2 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 14, 1955. Altitude of gage is 2,740 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	Aug. 23, 1955	2.20	132
1956	June 18, 1956	2.11	123
1957	Feb. 28, 1957	.66	27
1958	July 31, 1958	2.86	193
1959	Mar. 1, 1959	3.86	412
1960	Mar. 18, 1960	3.37	275
1961	Aug. 10, 1961	.90	40
1962	June 15, 1962	b 8.3	a 125
1963	May 11, 1963	2.87	194
1964	May 3, 1964	1.89	105
1965	March 1965	b 3.84	a 200
1966	March 1966	b 1.36	a 30

a About.

b Backwater from ice.

75. North Fork McDonald Creek tributary near Heath, Mont. (6-1291)

Location.--Lat $47^{\circ}04'$, long $109^{\circ}13'$, in NE $\frac{1}{4}$ sec.17, T.15 N., R.20 E.,
at culvert on U. S. Highway 87 and State Highway 20, 5 miles
northeast of Heath.

Drainage area.--2.24 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 19, 1959. Altitude of gage
is 4,280 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 18, 1960	1.04	Not determined
1961	Oct. 1, 1960	.02	Not determined
1962	May 21, 1962	1.21	Not determined
1963	May 12, 1963	.38	Not determined
1964	June 8, 1964	1.51	Not determined
1965	March 1965	.90	Not determined
1966	Mar. 31, 1966	.96	Not determined

76. Alkali Creek near Heath, Mont. (6-1292)

Location.--Lat $47^{\circ}05'$, long $109^{\circ}09'$, in $SE\frac{1}{4}$ sec.11, T.15 N., R.20 E., at bridge on county road, $7\frac{1}{2}$ miles northeast of Heath.

Drainage area.--3.76 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 19, 1959. Altitude of gage is 4,060 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 18, 1960	1.83	a 60
1961	Feb. 20, 1961	b .62	a 15
1962	June 15, 1962	7.4	757
1963	--	--	<1
1964	June 8, 1964	4.12	a 120
1965	March 1965	2.59	a 55
1966	Mar. 10, 1966	1.51	Not determined

77. South Fork McDonald Creek tributary near Grass Range, Mont. (6-1294)

Location.--Lat $47^{\circ}00'$, long $108^{\circ}47'$, in center of sec.3, T.14 N., R.23 E., at culvert on U. S. Highway 87, 1.4 road miles south of the approach road to Grass Range, $1\frac{1}{2}$ miles southeast of Grass Range.

Drainage area.--0.51 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 15, 1963. Altitude of gage is 3,700 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	June 29, 1963	0.16	6
1964	June 8, 1964	2.42	38
1965	March 1965	.40	8
1966	March 1966	b 1.30	a 1

a About.

b Backwater from ice.

78. McDonald Creek at Winnett, Mont. (6-1295)

Location.--Lat 47°00', long 108°21', in NW $\frac{1}{4}$ sec.7, T.14 N., R.27 E., at bridge on State Secondary Highway 244, three-quarters of a mile south of Winnett.

Drainage area.--421 sq mi.

Records available.--April 1930 to December 1932, February 1934 to September 1945, and February 1953 to September 1956 (continuous record), October 1956 to

Gage.--Crest-stage gage installed Sept. 19, 1960. Prior to Oct. 1, 1956, wire-weight gage, and Oct. 1, 1956, to March 1960, crest-stage gage 1 mile downstream at different datum. Altitude of gage is 2,930 ft (by barometer), at old site.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1931	Mar. 1-3, 1931	13.30	d 4.2
1932	June 9, 1932	20.40	d 562
1934	June 9, 1934	18.12	d 351
1935	July 8, 1935	18.30	d 371
1936	Mar. 5, 1936	--	a 220
1937	July 13, 1937	18.75	401
1938	July 8, 1938	18.71	d 328
1939	June 19, 1939	4.55	270
1940	Mar. 3, 1940	--	a 75
1941	June 28, 1941	5.42	482
1942	May 15 or 16, 1942	7.5	900
1943	June 8, 18, 1943	5.59	d 549
1944	June 20, 1944	7.40	853
1945	June 7, 1945	2.48	d 180
1953	June 10, 1953	5.66	d 424
1954	Aug. 5, 1954	3.00	47
1955	Apr. 11, 1955	4.39	241
1956	Aug. 3, 1956	2.55	88
1957	Mar. 19, 1957	2.20	67
1958	July 19, 1958	3.23	150
1959	Mar. 1, 1959	b 6.84	a 400
1960	Mar. 19, 1960	4.44	a 200
1961	Mar. 20, 1961	1.25	.1
1962	June 17, 1962	4.20	485
1963	Feb. 4, 1963	--	a 250
1964	June 10, 1964	a 10.0	1,440
1965	March 1965	b 7.70	a 800
1966	Mar. 9, 1966	--	a 200

a About.

b Backwater from ice or beaver dam.

d Maximum observed.

79. Gorman Coulee near Cat Creek, Mont. (6-1297)

Location.--Lat $47^{\circ}01'$, long $108^{\circ}06'$, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.15 N., R.29 E., at culvert on State Highway 20, 6 miles southwest of Cat Creek.

Drainage area.--2.32 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 14, 1955. Altitude of gage is 2,740 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	Aug. 23, 1955	5.59	385
1956	June 18, 1956	2.73	126
1957	Aug. 30, 1957	1.37	43
1958	July 19, 1958	2.09	83
1959	June 26, 1959	1.84	68
1960	--	--	Unknown
1961	--	--	(c)
1962	May 16, 1962	1.06	28
1963	--	--	<5
1964	Aug. 20, 1964	1.89	70
1965	July 10, 1965	4.05	237
1966	March 1966	.14	5

80. Gorman Coulee tributary near Cat Creek, Mont. (6-1298)

Location.--Lat $47^{\circ}01'$, long $108^{\circ}06'$, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.15 N., R.29 E., at culvert on State Highway 20, 6 miles southwest of Cat Creek.

Drainage area.--0.81 sq mi.

Records available.--May 1955 to

Gage.--Crest-stage gage installed May 27, 1955. Altitude of gage is 2,760 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	Aug. 23, 1955	3.02	159
1956	June 18, 1956	.96	32
1957	Aug. 30, 1957	1.24	44
1958	July 31, 1958	2.52	122
1959	Sept. 22, 1959	.28	10
1960	Mar. 18, 1960	.37	12
1961	Aug. 10, 1961	.50	15
1962	May 16, 1962	.55	17
1963	--	--	<5
1964	Aug. 20, 1964	1.85	78
1965	July 10, 1965	2.74	133
1966	Mar. 9, 1966	b .52	a 5

a About.

b Backwater from ice.

c No evidence of flow during year.

81. Cat Creek near Cat Creek, Mont. (6-1306)

Location.--Lat $47^{\circ}03'$, long $108^{\circ}01'$, in SW $\frac{1}{4}$ sec.23, T.15 N. R.29 E., at culvert on county road, $2\frac{1}{2}$ miles south of Cat Creek.

Drainage area.--36.5 sq mi.

Records available.--April 1958 to

Gage.--Crest-stage gage installed Apr. 19, 1958. Altitude of gage is 2,650 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	Aug. 15, 1958	2.76	92
1959	Mar. 12, 1959	4.58	170
1960	Mar. 18, 1960	5.85	379
1961	June 23, 1961	1.27	40
1962	June 16, 1962	6.19	748
1963	June 29, 1963	.72	26
1964	Aug. 20, 1964	2.61	90
1965	May 7, 1965	3.56	125
1966	Mar. 10, 1966	1.35	43

82. Second Creek tributary near Jordan, Mont. (6-1308)

Location.--Lat $47^{\circ}12'$, long $106^{\circ}48'$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31, T.17 N., R.39 E., at culvert on State Highway 22, 11 miles southeast of Jordan.

Drainage area.--0.75 sq mi.

Records available.--March 1958 to

Gage.--Crest-stage gage installed Mar. 18, 1958. Altitude of gage is 2,750 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1954	e Aug. 16, 1954	9.64	334
1958	--	--	(c)
1959	Mar. 17, 1959	1.22	13
1960	Mar. 18, 1960	1.75	21
1961	--	--	(c)
1962	Mar. 18, 1962	1.10	12
1963	Feb. 4, 1963	b 2.00	a 5
1964	June 18, 1964	9.62	304
1965	April 1965	1.58	18
1966	July 2, 1966	.91	8

a About.

b Backwater from ice.

c No evidence of flow during year.

e Prior to installation of gage; peak discharge computed from high-water marks along highway embankment at culvert.

83. Second Creek tributary No. 2 near Jordan, Mont. (6-1308.5)

Location.--Lat $47^{\circ}12'$, long $106^{\circ}49'$, in NW $\frac{1}{4}$ sec.25, T.17 N., R.38 E., at culvert on State Highway 22, $9\frac{1}{2}$ miles southeast of Jordan.

Drainage area.--1.90 sq mi.

Records available.--March 1958 to

Gage.--Crest-stage gage installed Mar. 18, 1958. Altitude of gage is 2,750 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	June 1958	0.86	23
1959	Mar. 17, 1959	1.7	58
1960	Mar. 18, 1960	1.98	75
1961	Sept. 11, 1961	-.37	a 2
1962	Mar. 18, 1962	.51	15
1963	Feb. 26, 1963	.82	20
1964	June 18, 1964	8.40	760
1965	Mar. 31, 1965	1.65	55
1966	July 2, 1966	.40	13

84. Second Creek tributary No. 3 near Jordan, Mont. (6-1309)

Location.--Lat $47^{\circ}13'$, long $106^{\circ}50'$, in NW $\frac{1}{4}$ sec.23, T.17 N., R.38 E., at culvert on State Highway 22, $8\frac{1}{2}$ miles southeast of Jordan.

Drainage area.--0.60 sq mi.

Records available.--July 1958 to

Gage.--Crest-stage gage installed July 23, 1958. Altitude of gage is 2,780 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	--	--	(c)
1959	Mar. 3, 1959	1.77	31
1960	Mar. 18, 1960	1.03	18
1961	June 1, 1961	.23	a 3
1962	July 14, 1962	.81	14
1963	July 18, 1963	.47	8
1964	June 18, 1964	13.32	458
1965	Mar. 31, 1965	1.44	25
1966	Mar. 10, 1966	.39	7

a About.

c No evidence of flow during year.

85. Little Dry Creek near Van Norman, Mont. (6-1309.5)

Location.--Lat $47^{\circ}21'$, long $106^{\circ}22'$, in SE $\frac{1}{4}$ sec.4, T.18 N., R.42 E.,
at bridge on State Highway 20, $1\frac{1}{2}$ miles southeast of Van Norman.

Drainage area.--1,224 sq mi.

Records available.--May 1958 to

Gage.--Crest-stage gage installed May 5, 1958. Altitude of gage is
2,350 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	July 6, 1958	0.83	160
1959	Mar. 18, 1959	6.80	5,200
1960	Mar. 20, 1960	b 7.6	a 4,000
1961	Sept. 11, 1961	3.08	1,320
1962	Mar. 22, 1962	2.32	850
1963	Feb. 6, 1963	b 2.49	a 800
1964	July 5, 1964	2.88	1,200
1965	Aug. 6, 1965	6.01	g 4,300
1966	July 3, 1966	4.39	2,450

86. Livermore Creek near Babb, Mont. (6-1322.5)

Location.--Lat $48^{\circ}46'$, long $113^{\circ}11'$, in NE $\frac{1}{4}$ sec.28, T.35 N., R.12 W.,
at bridge on State Secondary Highway 464, $13\frac{1}{2}$ miles southeast
of Babb.

Drainage area.--25.0 sq mi.

Records available.--August 1961 to

Gage.--Crest-stage gage installed Aug. 13, 1961. Altitude of gage
is 4,730 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1961	--	--	Unknown
1962	Apr. 13, 1962	3.43	152
1963	July 5, 1963	2.62	75
1964	June 8, 1964	--	4,880
1965	May 26, 1965	7.21	1,150
1966	June 4, 1966	7.41	196

a About.

b Backwater from ice.

g May have been greater April 1 during ice period.

87. Middle Fork Milk River near Babb, Mont. (6-1323)

Location.--Lat 48°51', long 113°13', in SE $\frac{1}{4}$ sec.30, T.36 N., R.12 W.,
at culvert on State Secondary Highway 464, 10 miles east of Babb.

Drainage area.--14.0 sq mi.

Records available.--August 1961 to September 1964 (discontinued).

Gage.--Crest-stage gage installed Aug. 13, 1961. Altitude of gage
is 4,810 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1961	--	--	Unknown
1962	Apr. 13, 1962	2.62	107
1963	July 5, 1963	b 2.12	a 30
1964	June 8, 1964	2.96	558

88. Dry Fork Milk River near Babb, Mont. (6-1324)

Location.--Lat 48°50', long 113°12', in SE $\frac{1}{4}$ sec.32, T.36 N., R.12 W.,
at bridge on State Secondary Highway 464, 11 miles east of Babb.

Drainage area.--17.4 sq mi.

Records available.--August 1961 to

Gage.--Crest-stage gage installed Aug. 13, 1961. Altitude of gage
is 4,750 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1961	--	--	Unknown
1962	Apr. 13, 1962	3.96	394
1963	July 5, 1963	2.41	70
1964	June 8, 1964	5.20	1,880
1965	Apr. 26, 1965	3.92	98
1966	June 4, 1966	4.32	450

a About.

b Backwater from ice or debris.

89. Milk River near Del Bonita, Mont. (6-1327)

Location.--Lat $48^{\circ}57'$, long $112^{\circ}45'$, in center of $N\frac{1}{2}$ sec.23, T.37 N., R.9 W., at bridge on State Secondary Highway 483, $3\frac{1}{2}$ miles south-east of customs post at Del Bonita.

Drainage area.--325 sq mi.

Records available.--August 1961 to . (Seasonal record station April 1962 to November 1964).

Gage.--Crest-stage gage installed Aug. 12, 1961. Altitude of gage is 4,030 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1961	--	--	Unknown
1962	Apr. 14, 1962	b 4.13	a 800
1963	Feb. 6, 1963	b 5.10	d 765
1964	June 8, 1964	9.0	17,300
1965	Apr. 13, 1965	4.87	1,600
1966	June 5, 1966	5.39	2,330

90. Van Cleeve Coulee tributary near Sunburst, Mont. (6-1348)

Location.--Lat $48^{\circ}53'$, long $111^{\circ}49'$, on north line of $NE\frac{1}{4}$ sec.14, T.36 N., R.2 W., at culverts on county road, 3.7 road miles east of interchange on Interstate 15 at Sunburst.

Drainage area.--10.8 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 17, 1963. Altitude of gage is 3,340 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	--	--	(c)
1964	May 3, 1964	2.08	35
1965	Apr. 7, 1965	4.00	239
1966	Mar. 9, 1966	1.55	15

a About.

b Backwater from ice.

c No evidence of flow during year.

d Maximum observed.

91. Sage Creek tributary at Hingham, Mont. (6-1379)

Location.--Lat $48^{\circ}34'$, long $110^{\circ}25'$, in center sec.3, T.32 N., R.10 E., at culvert on farm road, half a mile northeast of Hingham.

Drainage area.--1.08 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 27, 1959. Altitude of gage is 3,000 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 17, 1960	1.51	14
1961	--	--	(c)
1962	June 14, 1962	5.46	299
1963	July 3, 1963	2.27	26
1964	April 1964	.06	.1
1965	Apr. 9, 1965	2.71	45
1966	Mar. 9, 1966	1.40	18

92. South Fork Spring Coulee near Havre, Mont. (6-1387)

Location.--Lat $48^{\circ}25'$, long $109^{\circ}50'$, in NE $\frac{1}{4}$ sec.31, T.31 N., R.15 E., at culvert on county road, 12 miles southwest of Havre.

Drainage area.--6.47 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 26, 1959. Altitude of gage is 2,770 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 17, 1960	2.04	33
1961	May 31, 1961	.04	2
1962	Mar. 18, 1962	1.68	25
1963	June 22, 1963	2.06	34
1964	May 3, 1964	.10	2
1965	April 1965	2.47	44
1966	Mar. 9, 1966	4.42	190

c No evidence of flow during year.

93. Spring Coulee near Havre, Mont. (6-1388)

Location.--Lat $48^{\circ}25'$, long $109^{\circ}52'$, in NW $\frac{1}{4}$ sec.25, T.31 N., R.14 E.,
at culverts on county road, 13 miles southwest of Havre.

Drainage area.--17.8 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 26, 1959. Altitude of gage is
2,670 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	e Mar. 11, 1959	5.60	257
1960	Mar. 17, 1960	--	a 10
1961	--	--	(c)
1962	Mar. 18, 1962	1.32	48
1963	Feb. 3, 1963	1.35	46
1964	--	--	(c)
1965	Apr. 6, 1965	2.01	77
1966	Mar. 9, 1966	6.24	345

a About.

c No evidence of flow during year.

e Prior to installation of gage; peak discharge computed from high-water marks along highway embankment at culvert.

94. Big Sandy Creek near Assinniboine, Mont. (6-1395)

Location.--Lat $48^{\circ}32'$, long $109^{\circ}50'$, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.18, T.32 N., R.15 E., 2 miles northwest of Assinniboine.

Drainage area.--1,805 sq mi.

Records available.--February 1946 to November 1953 (continuous record), April 1955 to

Gage.--Water-stage recorder re-installed Apr. 9, 1955. Altitude of gage is 2,510 ft (by barometer).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1946	Feb. 27, 1946	--	h 86
1947	Mar. 21, 1947	9.68	i 2,080
1948	Mar. 22, 1948	--	h 17
1949	Mar. 31, 1949	--	h 5
1950	Mar. 29, 1950	3.88	208
1951	Mar. 23, 1951	5.01	391
1952	Apr. 3, 1952	14.70	5,570
1953	June 6, 1953	6.56	714
1954	--	--	Unknown
1955	Apr. 11, 1955	6.48	698
1956	Mar. 30, 1956	b 6.47	a 550
1957	Feb. 28, 1957	b 5.13	a 250
1958	Mar. 28, 1958	--	a 500
1959	Mar. 11, 1959	7.80	1,100
1960	Mar. 25, 1960	a 4.1	215
1961	June 3, 1961	3.64	132
1962	June 12, 1962	2.54	6
1963	Feb. 6, 1963	2.16	.1
1964	May 19, 1964	6.62	700
1965	Apr. 12, 1965	11.31	2,950
1966	Mar. 9, 1966	8.07	1,200

a About.

b Backwater from ice.

h Maximum daily.

i Maximum recorded.

95. Bullhook Creek near Havre, Mont. (6-1404)

Location.--Lat $48^{\circ}31'$, long $109^{\circ}38'$, in NE $\frac{1}{4}$ sec.27, T.32 N., R.16E.,
at bridge on county road, $3\frac{1}{2}$ miles south of Havre.

Drainage area.--39.6 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 26, 1959. Altitude of gage
is 2,610 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 18, 1960	1.84	85
1961	--	--	(c)
1962	Mar. 18, 1962	1.49	55
1963	Feb. 24, 1963	.86	13
1964	May 4, 1964	1.38	47
1965	Aug. 23, 1965	3.68	250
1966	Mar. 9, 1966	3.87	265

96. Milk River tributary near Lohman, Mont. (6-1419)

Location.--Lat $48^{\circ}35'$, long $109^{\circ}26'$, in SW $\frac{1}{4}$ sec.30, T.33 N., R.18E.,
at culvert on U. S. Highway 2, 1.2 miles west of Lohman.

Drainage area.--0.16 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 26, 1959. Altitude of gage
is 2,450 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 15, 1960	0.24	1.5
1961	--	--	(c)
1962	--	--	(c)
1963	--	--	(c)
1964	--	--	(c)
1965	July 7, 1965	0.96	Not determined
1966	Mar. 9, 1966	1.24	Not determined

c No evidence of flow during year.

97. Black Coulee near Malta, Mont. (6-1551)

Location.--Lat $48^{\circ}13'$, long $108^{\circ}02'$, in NE $\frac{1}{4}$ sec.1, T.28 N., R.28 E., at bridge on U. S. Highway 191, 12 miles southwest of Malta.

Drainage area.--6.64 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 27, 1955. Altitude of gage is 2,450 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	July 3, 1956	1.98	Not determined
1957	Mar. 19, 1957	1.85	Not determined
1958	April 1958	1.02	Not determined
1959	Mar. 13, 1959	2.93	Not determined
1960	Mar. 18, 1960	3.21	Not determined
1961	May 30, 1961	1.04	Not determined
1962	July 18, 1962	2.96	Not determined
1963	Feb. 5, 1963	2.93	Not determined
1964	May 3, 1964	3.16	Not determined
1965	May 7, 1965	2.45	Not determined
1966	March 1966	.91	Not determined

98. Alkali Creek near Malta, Mont. (6-1552)

Location.--Lat $48^{\circ}16'$, long $107^{\circ}58'$, near center sec.16, T.29 N., R.29 E., at bridge on U. S. Highway 191, 8 $\frac{1}{4}$ miles southwest of Malta.

Drainage area.--162 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 27, 1955. Altitude of gage is 2,270 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	Mar. 19, 1956	b 0.85	a 45
1957	Mar. 21, 1957	1.69	355
1958	Mar. 25, 1958	.82	104
1959	Mar. 13, 1959	b 3.0	a 800
1960	--	--	Unknown
1961	--	(f)	<220
1962	July 14, 1962	2.68	750
1963	Feb. 5, 1963	b 3.09	a 700
1964	May 4, 1964	1.36	245
1965	April 1965	a 4.0	Not determined
1966	--	(f)	<10

a About.

b Backwater from ice.

f Peak discharge did not reach bottom of gage.

99. Disjardin Coulee near Malta, Mont. (6-1553)

Location.--Lat $48^{\circ}16'$, long $107^{\circ}58'$, in $SE\frac{1}{4}NW\frac{1}{4}$ sec.16, T.29 N., R.29 E., at bridge on U. S. Highway 191, 8 miles southwest of Malta.

Drainage area.--3.42 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 26, 1955. Altitude of gage is 2,290 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	Aug. 5, 1956	3.22	160
1957	Mar. 19, 1957	1.02	22
1958	--	--	(c)
1959	Mar. 18, 1959	1.62	132
1960	Mar. 18, 1960	.61	32
1961	May 30, 1961	.44	20
1962	July 18, 1962	2.23	a 200
1963	Feb. 5, 1963	b 3.25	a 100
1964	Aug. 20, 1964	.38	7
1965	Apr. 12, 1965	5.15	a 360
1966	March 1966	1.37	34

100. South Fork Taylor Creek near Malta, Mont. (6-1554)

Location.--Lat $48^{\circ}19'$, long $107^{\circ}55'$, in $SE\frac{1}{4}$ sec.26, T.30 N., R.29 E., at bridge on U. S. Highway 191, $3\frac{1}{2}$ miles southwest of Malta.

Drainage area.--5.08 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 28, 1955. Altitude of gage is 2,290 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	Mar. 19, 1956	1.75	52
1957	Mar. 19, 1957	1.43	22
1958	--	--	(c)
1959	July 13, 1959	1.94	84
1960	Mar. 18, 1960	1.89	75
1961	July 30, 1961	.90	2
1962	July 18, 1962	1.54	65
1963	Feb. 5, 1963	.95	20
1964	--	--	(c)
1965	Apr. 12, 1965	.68	<1
1966	--	--	(c)

a About.

b Backwater from ice.

c No evidence of flow during year.

101. Unger Creek near Vandalia, Mont. (6-1723)

Location.--Lat $48^{\circ}22'$, long $106^{\circ}48'$, in SW $\frac{1}{4}$ sec.9, T.30 N., R.38 E., at bridge on U. S. Highway 2, $4\frac{1}{2}$ miles northeast of Vandalia.

Drainage area.--11.1 sq mi.

Records available.--April 1958 to

Gage.--Crest-stage gage installed Apr. 15, 1958. Altitude of gage is 2,220 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	March 1958	0.92	10
1959	Apr. 1, 1959	1.41	32
1960	Mar. 20, 1960	2.32	225
1961	June 13, 1961	1.02	13
1962	July 14, 1962	3.28	575
1963	June 29, 1963	2.23	46
1964	July 19, 1964	1.20	12
1965	May 6, 1965	2.63	330
1966	March 1966	1.15	10

102. Mooney Coulee near Tampico, Mont. (6-1723.5)

Location.--Lat $48^{\circ}17'$, long $106^{\circ}42'$, in NW $\frac{1}{4}$ sec.7, T.29 N., R.39 E., at bridge on U. S. Highway 2, $5\frac{1}{2}$ miles east of Tampico.

Drainage area.--12.8 sq mi.

Records available.--August 1960 to

Gage.--Crest-stage gage installed Aug. 24, 1960. Altitude of gage is 2,220 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	--	--	Unknown
1961	June 13, 1961	2.37	400
1962	July 14, 1962	2.20	220
1963	Feb. 5, 1963	b 1.30	a 50
1964	--	--	(c)
1965	May 1965	.14	<1
1966	July 13, 1966	.40	2

a About.

b Backwater from ice.

c No evidence of flow during year.

103. Milk River tributary No. 2 near Glasgow, Mont. (6-1724)

Location.--Lat $48^{\circ}15'$, long $106^{\circ}41'$, in center of sec.29, T.29 N., R.39 E., at bridge on U. S. Highway 2, $3\frac{1}{2}$ miles northwest of Glasgow.

Drainage area.--

Records available.--June 1958 to August 1960 (discontinued).

Gage.--Crest-stage gage installed June 28, 1958.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	--	--	Unknown
1959	Apr. 1, 1959	1.79	Unknown

104. East Fork Sand Creek near Vida, Mont. (6-1755.5)

Location.--Lat $47^{\circ}48'$, long $105^{\circ}37'$, in NW $\frac{1}{4}$ sec.31, T.24 N., R.148 E., at culverts on county road, 5.8 road miles west from State Highway 13 on Sand Creek road, 6 miles southwest of Vida.

Drainage area.--8.51 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 18, 1963. Altitude of gage is 2,200 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	June 6, 1963	4.88	600
1964	June 18, 1964	1.24	94
1965	Apr. 2, 1965	--	a 250
1966	July 2, 1966	5.9	1,180

105. West Fork Wolf Creek near Lustre, Mont. (6-1756)

Location.--Lat 48°23', long 106°00', in SW $\frac{1}{4}$ sec.3, T.30 N., R.44 E., at bridge on county road, 5 miles west of Lustre.

Drainage area.--6.57 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 9, 1955. Altitude of gage is 2,740 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	June 26, 1956	0.89	Not determined
1957	Apr. 23, 1957	2.24	Not determined
1958	--	--	(c)
1959	Mar. 25, 1959	.68	Not determined
1960	Mar. 18, 1960	1.99	Not determined
1961	Apr. 3, 1961	.33	Not determined
1962	Mar. 25, 1962	.90	Not determined
1963	Mar. 6, 1963	.95	Not determined
1964	Apr. 1, 1964	--	Not determined
1965	--	--	(c)
1966	March 1966	.31	Not determined

106. East Fork Wolf Creek near Lustre, Mont. (6-1757)

Location.--Lat 48°24', long 105°48', in SE $\frac{1}{4}$ sec.30, T.31 N., R.46 E., at culverts on county road, 4 miles east of Lustre.

Drainage area.--9.61 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 9, 1955. Altitude of gage is 2,720 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	April 1956	3.24	Not determined
1957	March 1957	3.28	Not determined
1958	March 1958	.58	Not determined
1959	June 21, 1959	.45	Not determined
1960	Mar. 19, 1960	--	a 150
1961	Mar. 5, 1961	--	a 130
1962	June 14, 1962	--	74
1963	Mar. 6, 1963	--	a 40
1964	Apr. 1, 1964	--	a 50
1965	June 16, 1965	2.92	Not determined
1966	March 1966	4.79	Not determined

a About.

c No evidence of flow during year.

107. Wolf Creek tributary near Wolf Point, Mont. (6-1758)

Location.--Lat $48^{\circ}14'$, long $105^{\circ}46'$, in sec.29, T.29 N., R.46 E.,
at bridge on county road, 15 miles northwest of Wolf Point.

Drainage area.--2.46 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 24, 1955. Altitude of gage
is 2,310 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	July 1955	0.50	Not determined
1956	April 1956	1.61	Not determined
1957	March 1957	.89	Not determined
1958	--	--	(c)
1959	Mar. 25, 1959	.97	Not determined
1960	--	--	Unknown
1961	Mar. 5, 1961	.33	Not determined
1962	June 14, 1962	2.46	Not determined
1963	Aug. 26, 1963	.36	Not determined
1964	May 5, 1964	.03	Not determined
1965	June 16, 1965	1.15	Not determined
1966	March 1966	.75	Not determined

108. Wolf Creek tributary No. 2 near Wolf Point, Mont. (6-1759)

Location.--Lat $48^{\circ}12'$, long $105^{\circ}45'$, in sec.11, T.28 N., R.46 E.,
at bridge on county road, $9\frac{1}{2}$ miles northwest of Wolf Point.

Drainage area.--6.54 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 24, 1955. Altitude of gage
is 2,240 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	July 1955	1.50	Not determined
1956	April 1956	1.92	Not determined
1957	July 14, 1957	2.03	Not determined
1958	Mar. 24, 1958	1.62	Not determined
1959	June 20, 1959	3.81	979
1960	Mar. 18, 1960	3.24	Not determined
1961	May 21, 1961	3.00	Not determined
1962	July 1, 1962	4.78	Not determined
1963	July 10, 1963	4.18	Not determined
1964	May 5, 1964	1.56	Not determined
1965	June 16, 1965	2.66	Not determined
1966	July 2, 1966	3.23	Not determined

c No evidence of flow during year.

109. Wolf Creek near Wolf Point, Mont. (6-1765)

Location.--Lat $48^{\circ}06'$, long $105^{\circ}41'$, in $N\frac{1}{2}$ sec.17, T.27 N., R.47 E.,
2 miles northwest of Wolf Point.

Drainage area.--251 sq mi.

Records available.--August 1908 to July 1914 and March 1950 to
September 1953 (continuous record), 1954, May 1955 to

Gage.--Water-stage recorder re-installed May 6, 1955. Altitude
of gage is 2,010 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1909	--	--	Unknown
1910	Mar. 13-15, 1910	3.9	d 110
1911	Mar. 19-23, 1911	4.45	d 154
1912	Apr. 1, 1912	5.9	d 270
1913	--	--	Unknown
1914	--	--	Unknown
1950	Apr. 18, 1950	5.30	188
1951	Apr. 5, 1951	6.06	324
1952	Apr. 7, 1952	9.25	7,050
1953	June 3, 1953	7.29	1,010
1954	Apr. 4 or 5, 1954	12.9	9,780
1956	Mar. 23, 1956	--	a 60
1957	July 14, 1957	5.29	a 180
1958	Apr. 1, 1958	3.30	a 6
1959	June 21, 1959	6.74	a 330
1960	Mar. 20, 1960	9.71	Not determined
1961	May 22, 1961	5.97	120
1962	June 15, 1962	7.95	1,440
1963	July 11, 1963	5.60	140
1964	May 5, 1964	5.07	52
1965	July 8, 1965	6.32	a 480
1966	July 2, 1966	6.92	950

a About.

d Maximum observed.

110. East Fork Duck Creek near Brockway, Mont. (6-1770.5)

Location.--Lat $47^{\circ}12'$, long $105^{\circ}47'$, in sec.31, T.17 N., R.47 E.,
at bridge on county road, 8 miles south of Brockway.

Drainage area.--12.4 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 13, 1955. Altitude of gage
is 2,660 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	July 12, 1955	1.46	106
1956	Mar. 2, 1956	1.08	60
1957	July 14, 1957	3.64	505
1958	July 21, 1958	.19	8
1959	Mar. 18, 1959	2.47	273
1960	Aug. 16, 1960	1.65	140
1961	May 31, 1961	1.62	134
1962	July 14, 1962	1.97	190
1963	June 6, 1963	4.30	650
1964	July 5, 1964	1.31	93
1965	June 16, 1965	2.33	250
1966	July 1, 1966	2.19	224

111. Duck Creek near Brockway, Mont. (6-1771)

Location.--Lat $47^{\circ}15'$, long $105^{\circ}49'$, in SE $\frac{1}{4}$ sec.11, T.17 N., R.46 E.,
at bridge on county road, 5 miles southwest of Brockway.

Drainage area.--54.0 sq mi.

Records available.--1921-22, miscellaneous measurements only. May
1957 to

Gage.--Crest-stage gage installed May 21, 1957. Altitude of gage is
2,580 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1957	July 14, 1957	4.00	640
1958	July 3, 1958	1.05	40
1959	Mar. 18, 1959	5.15	1,000
1960	Mar. 20, 1960	3.57	520
1961	June 1, 1961	-.06	a 1
1962	June 6, 1962	2.59	270
1963	June 6, 1963	4.79	890
1964	July 5, 1964	1.76	a 50
1965	June 16, 1965	4.74	870
1966	July 1, 1966	1.85	130

112. Redwater Creek at Brockway, Mont. (6-1771.5)

Location.--Lat $47^{\circ}19'$, long $105^{\circ}45'$, in NW $\frac{1}{4}$ sec.20, T.18 N., R.47 E., at bridge on county road, a quarter of a mile northwest of Brockway.

Drainage area.--216 sq mi.

Records available.--January 1958 to

Gage.--Crest-stage gage installed Jan. 16, 1958. Altitude of gage is 2,550 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1957	e July 14, 1957	5.8	1,220
1958	July 3, 1958	1.86	130
1959	Mar. 18, 1959	5.53	1,130
1960	Mar. 20, 1960	b 6.94	a 1,000
1961	June 1, 1961	2.26	200
1962	June 6, 1962	5.80	1,220
1963	June 6, 1963	5.45	1,520
1964	July 5, 1964	3.95	790
1965	Apr. 3, 1965	4.56	a 800
1966	March 1966	3.26	420

113. Tusler Creek near Brockway, Mont. (6-1772)

Location.--Lat $47^{\circ}18'$, long $105^{\circ}39'$, in SE $\frac{1}{4}$ sec.24, T.18 N., R.47 E., at bridge on county road, 4 miles east of Brockway.

Drainage area.--90.2 sq mi.

Records available.--October 1956 to

Gage.--Crest-stage gage installed Oct. 12, 1956. Altitude of gage is 2,550 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1957	Feb. 27, 1957	1.66	200
1958	July 21, 1958	-.22	14
1959	Mar. 18, 1959	b 2.16	a 150
1960	Mar. 20, 1960	1.96	280
1961	Mar. 6, 1961	-.04	18
1962	July 19, 1962	3.36	430
1963	June 6, 1963	2.34	280
1964	July 5, 1964	1.88	215
1965	June 16, 1965	1.15	120
1966	March 1966	1.43	155

a About.

b Backwater from ice.

e Prior to installation of gage.

114. Tusler Creek tributary near Brockway, Mont. (6-1772.5)

Location.--Lat $47^{\circ}18'$, long $105^{\circ}41'$, in NE $\frac{1}{4}$ sec.26, T.18 N., R.47 E., at bridge on county road, 4 miles east of Brockway.

Drainage area.--3.17 sq mi.

Records available.--September 1956 to

Gage.--Crest-stage gage installed Sept. 15, 1956. Altitude of gage is 2,590 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1957	July 14, 1957	0.81	Not determined
1958	--	--	(c)
1959	Mar. 18, 1959	.46	Not determined
1960	Aug. 16, 1960	1.10	Not determined
1961	--	--	(c)
1962	--	--	(c)
1963	Feb. 26, 1963	1.49	Not determined
1964	July 5, 1964	7.80	1,610
1965	April 1965	--	<1
1966	--	--	(c)

115. Redwater Creek tributary near Brockway, Mont. (6-1773)

Location.--Lat $47^{\circ}21'$, long $105^{\circ}41'$, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.2, T.18 N., R.47 E., at culvert on State Highway 20, 4 miles northeast of Brockway.

Drainage area.--0.29 sq mi.

Records available.--1954, July 1957 to

Gage.--Crest-stage gage installed Jan. 15, 1958. Altitude of gage is 2,500 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1954	e Aug. 18, 1954	7.40	72
1957	e July 14, 1957	9.40	83
1958	--	--	(c)
1959	Mar. 18, 1959	b 4.35	a 20
1960	Mar. 20, 1960	1.17	12
1961	July 29, 1961	1.65	16
1962	June 6, 1962	.62	8
1963	June 3, 1963	.60	8
1964	July 5, 1964	11.12	234
1965	June 16, 1965	.89	4
1966	March 1966	.69	3

a About.

b Backwater from ice.

c No evidence of flow during year.

e Prior to installation of gage; peak discharge computed from high-water marks along highway embankment at culvert.

116. South Fork Dry Ash Creek near Circle, Mont. (6-1773.5)

Location.--Lat $47^{\circ}18'$, long $105^{\circ}35'$, in NW $\frac{1}{4}$ sec.27, T.18 N., R.48 E., at bridge on county road, $9\frac{1}{4}$ miles south of Circle.

Drainage area.--5.74 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 13, 1955. Altitude of gage is 2,670 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	July 12, 1955	2.18	56
1956	Mar. 1, 1956	1.37	17
1957	Feb. 26, 1957	1.58	52
1958	June 3, 1958	.23	3
1959	Mar. 22, 1959	2.12	79
1960	Aug. 16, 1960	2.40	85
1961	--	--	(c)
1962	July 14, 1962	1.12	22
1963	June 6, 1963	.76	10
1964	July 5, 1964	1.93	58
1965	June 16, 1965	2.08	66
1966	June 4, 1966	1.52	37

117. McCune Creek near Circle, Mont. (6-1774)

Location.--Lat $47^{\circ}21'$, long $105^{\circ}35'$, in NW $\frac{1}{4}$ sec.3, T.18 N., R.48 E., near bridge on county road, 5 miles south of Circle.

Drainage area.--29.9 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 13, 1955. Altitude of gage is 2,500 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	July 12, 1955	4.32	128
1956	Mar. 20, 1956	3.31	52
1957	July 14, 1957	4.93	175
1958	June 3, 1958	.98	6
1959	Mar. 22, 1959	--	Unknown
1960	Mar. 20, 1960	5.44	a 150
1961	Mar. 6, 1961	1.36	a 5
1962	July 19, 1962	7.26	235
1963	June 6, 1963	6.29	a 450
1964	July 5, 1964	6.98	a 1,000
1965	June 16, 1965	5.28	180
1966	March 10, 1966	4.70	110

a About.

c No evidence of flow during year.

118. Cow Creek tributary near Vida, Mont. (6-1777)

Location.--Lat $47^{\circ}43'$, long $105^{\circ}29'$, in SE $\frac{1}{4}$ sec.36, T.23 N., R.48E., at bridge on State Highway 13, 8.8 miles south of Vida, and 20 miles northeast of Circle.

Drainage area.--1.71 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 18, 1963. Altitude of gage is 2,390 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	June 5, 1963	4.07	750
1964	--	--	(c)
1965	June 15, 1965	.90	20
1966	July 2, 1966	2.30	200

119. Wolf Creek tributary near Vida, Mont. (6-1778)

Location.--Lat $47^{\circ}55'$, long $105^{\circ}30'$, in SE $\frac{1}{4}$ sec.15, T.25 N., R.48E., at bridge on State Highway 13, 11.1 road miles south of the Missouri River bridge near Wolf Point, and 5.5 miles north of Vida.

Drainage area.--0.91 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed May 18, 1963. Altitude of gage is 2,400 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	July 14, 1962	8.58	Not determined
1963	Aug. 25, 1963	1.83	a 70
1964	--	--	(c)
1965	Apr. 13, 1965	3.00	Not determined
1966	July 4, 1966	5.45	Not determined

a About.

c No evidence of flow during year.

120. Missouri River tributary No. 2 near Brockton, Mont.(6-1812)

Location.--Lat $48^{\circ}09'$, long $104^{\circ}54'$, in NE $\frac{1}{4}$ sec.29, T.28 N.,
R.53 E., at culverts on U. S. Highway 2, 1.2 miles east of
Brockton.

Drainage area.--1.60 sq mi.

Records available.--August 1962 to

Gage.--Crest-stage gage installed May 19, 1963. Altitude of gage
is 1,960 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	Aug. 10, 1962	8.08	260
1963	July 24, 1963	8.34	313
1964	Apr. 1, 1964	1.53	53
1965	June 15, 1965	1.88	62
1966	July 4, 1966	1.23	48

121. Big Muddy Creek at Plentywood, Mont. (6-1830)

Location.--Lat $48^{\circ}46'$, long $104^{\circ}35'$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.30, T.35 N., R.55 E., at Plentywood.

Drainage area.--850 sq mi.

Records available.--April 1948 to September 1953 (continuous record), June 1955 to

Gage.--Crest-stage gage installed June 10, 1955. Recording gage April 1948 to September 1953. Altitude of gage is 1,980 ft (by barometer).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1948	Apr. 19, 1948	15.64	2,850
1949	Mar. 30, 1949	10.49	1,020
1950	Apr. 18, 1950	12.27	1,620
1951	May 3, 1951	11.38	1,360
1952	Apr. 8, 1952	19.00	7,240
1953	June 30, 1953	19.40	8,000
1954	--	--	Unknown
1955	--	(f)	<210
1956	Mar. 22, 1956	b 6.63	a 300
1957	July 16, 1957	6.58	413
1958	Mar. 29, 1958	12.92	1,630
1959	June 30, 1959	10.61	945
1960	Mar. 22, 1960	b 17.37	a 3,500
1961	May 30, 1961	6.03	260
1962	Mar. 27, 1962	11.99	1,250
1963	Mar. 22, 1963	b 12.00	a 750
1964	May 3, 1964	7.14	390
1965	Apr. 16, 1965	7.98	500
1966	Mar. 14, 1966	9.58	750

a About.

b Backwater from ice.

f Peak discharge did not reach bottom of gage.

122. Box Elder Creek near Plentywood, Mont. (6-1831)

Location.--Lat $48^{\circ}50'$, long $104^{\circ}30'$, in sec.34, T.36 N., R.55 E.,
at culverts on county road, 4 miles northeast of Plentywood.

Drainage area.--9.40 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 10, 1955. Altitude of gage
is 2,200 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	March 1956	0.25	0
1957	July 23, 1957	7.24	328
1958	Mar. 30, 1958	1.88	22
1959	June 26, 1959	3.89	126
1960	Mar. 21, 1960	6.24	265
1961	July 30, 1961	1.58	41
1962	Mar. 26, 1962	2.79	65
1963	Sept. 17, 1963	4.06	103
1964	Mar. 31, 1964	5.49	217
1965	Apr. 14, 1965	2.90	72
1966	Mar. 13, 1966	2.98	75

123. Box Elder Creek at damsite, near Plentywood, Mont. (6-1832)

Location.--Lat $48^{\circ}48'$, long $104^{\circ}33'$, in NE $\frac{1}{4}$ sec.17, T.35 N., R.55 E.,
at old damsite, $1\frac{1}{2}$ miles north of Plentywood.

Drainage area.--19.9 sq mi.

Records available.--1953, March 1955 to September 1963 (discontinued).

Gage.--Crest-stage gage installed June 10, 1955. Altitude of gage
is 2,120 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1953	e June 30, 1953	6.52	6,530
1955	e Mar. 29, 1955	2.42	890
1956	--	--	(c)
1957	July 23, 1957	3.56	1,600
1958	Mar. 30, 1958	.75	210
1959	June 26, 1959	1.38	430
1960	Mar. 22, 1960	2.27	820
1961	Mar. 20, 1961	1.26	395
1962	Mar. 26, 1962	1.59	530
1963	Sept. 17, 1963	.81	230

c No evidence of flow during year.

e Prior to installation of gage.

124. Spring Creek near Plentywood, Mont. (6-1833)

Location.--Lat $48^{\circ}49'$, long $104^{\circ}27'$, in SW $\frac{1}{4}$ sec.6, T.35 N., R.55 E., at culvert on county road, 5 miles northeast of Plentywood.

Drainage area.--7.05 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 10, 1955. Altitude of gage is 2,260 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	July 7, 1955	0.69	5
1956	--	--	(c)
1957	July 23, 1957	2.77	76
1958	Mar. 30, 1958	1.49	25
1959	June 26, 1959	1.30	20
1960	Mar. 21, 1960	5.19	240
1961	July 30, 1961	1.20	17
1962	Mar. 26, 1962	1.32	24
1963	Sept. 17, 1963	a 2.7	72
1964	Mar. 31, 1964	b 5.45	a 40
1965	Apr. 14, 1965	b .67	a 10
1966	Mar. 13, 1966	2.33	60

125. Spring Creek at Highway 16, near Plentywood, Mont. (6-1834)

Location.--Lat $48^{\circ}46'$, long $104^{\circ}31'$, in SE $\frac{1}{4}$ sec.21, T.35 N., R.55 E., at bridge on State Highway 16, $1\frac{1}{2}$ miles east of Plentywood.

Drainage area.--16.9 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 23, 1955. Altitude of gage is 2,040 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	--	--	(c)
1956	Apr. 3, 1956	0.74	4
1957	July 23, 1957	3.38	540
1958	Mar. 30, 1958	2.40	230
1959	June 26, 1959	3.70	660
1960	May 24, 1960	3.56	600
1961	Mar. 20, 1961	1.02	10
1962	Mar. 26, 1962	2.85	375
1963	Sept. 17, 1963	3.61	620
1964	May 3, 1964	1.24	26
1965	Apr. 15, 1965	1.18	20
1966	Mar. 13, 1966	b 2.77	a 60

a About.

b Backwater from ice.

c No evidence of flow during year.

126. Big Muddy Creek tributary near Culbertson, Mont. (6-1851)

Location.--Lat $48^{\circ}12'$, long $104^{\circ}42'$, in center of east edge of sec.11, T.28 N., R.54 E., at culverts on county road, 1.9 miles north of U. S. Highway 2, 10 miles northeast of Brockton, and 9 miles northwest of Culbertson.

Drainage area.--7.38 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 19, 1963. Altitude of gage is 1,940 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	July 10, 1963	9.6	676
1964	June 18, 1964	3.60	85
1965	June 15, 1965	1.00	20
1966	March 1966	.75	10

127. Missouri River tributary No. 3 near Culbertson, Mont. (6-1852)

Location.--Lat $48^{\circ}06'$, long $104^{\circ}31'$, in center sec.8, T.27 N., R.56 E., at culvert on county road along the south side of the Missouri River, 2.2 miles west of State Highway 16, 3 miles south of Culbertson.

Drainage area.--1.29 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 19, 1963. Altitude of gage is 1,950 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	Aug. 25, 1963	3.88	142
1964	--	--	(c)
1965	--	--	<1
1966	July 4, 1966	--	2,570

c No evidence of flow during year.

128. Missouri River tributary No. 4 near Bainville, Mont. (6-1853)

Location.--Lat $48^{\circ}08'$, long $104^{\circ}21'$, in NW $\frac{1}{4}$ sec.34, T.28 N., R.57 E., at culvert on U. S. Highway 2, 0.8 miles east of Lannark, 8 miles east of Culbertson.

Drainage area.--11.6 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 19, 1963. Altitude of gage is 2,000 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	July 24, 1963	2.83	323
1964	June 14, 1964	12.02	1,670
1965	Apr. 17, 1965	2.28	250
1966	July 4, 1966	5.67	739

129. Missouri River tributary No. 5 at Culbertson, Mont. (6-1854)

Location.--Lat $48^{\circ}10'$, long $104^{\circ}31'$, in SE $\frac{1}{4}$ sec.20, T.28 N., R.56 E., at culvert on State Highway 16, 0.7 miles north of U. S. Highway 2, at Culbertson Rodeo Grounds.

Drainage area.--3.67 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 19, 1963. Altitude of gage is 1,970 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	July 24, 1963	6.60	495 (revised)
1964	June 14, 1964	2.59	128
1965	Apr. 17, 1965	1.01	a 30
1966	July 4, 1966	2.14	95

130. Yellowstone River tributary near Greycliff, Mont. (6-2015.5)

Location.--Lat $45^{\circ}44'$, long $109^{\circ}43'$, in SE $\frac{1}{4}$ sec.23, T.1 S., R.16 E., at culvert on Interstate Highway 90 and U. S. Highway 10, 4 miles southeast of Greycliff.

Drainage area.--2.72 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 5, 1959. Altitude of gage is 3,860 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	--	--	(c)
1961	--	--	(c)
1962	Feb. 8, 1962	0.45	3
1963	June 14, 1963	.55	4
1964	--	--	(c)
1965	Aug. 22, 1965	2.31	48
1966	Mar. 10, 1966	.48	3

131. Bridger Creek near Greycliff, Mont. (6-2016)

Location.--Lat $45^{\circ}41'$, long $109^{\circ}43'$, in NW $\frac{1}{4}$ sec.2, T.2 S., R.16 E., at bridge on county road, 6 miles southeast of Greycliff.

Drainage area.--61.5 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 5, 1959. Altitude of gage is 4,080 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	May 1960	0.62	18
1961	March 1961	-.03	5
1962	May 26, 1962	1.36	67
1963	June 14, 1963	1.46	71
1964	June 9, 1964	--	a 80
1965	Aug. 28, 1965	1.08	58
1966	May 5, 1966	1.38	75

a About.

c No evidence of flow during year.

132. Work Creek near Reed Point, Mont. (6-2016.5)

Location.--Lat $45^{\circ}42'$, long $109^{\circ}38'$, in SE $\frac{1}{4}$ sec.33, T.1 S., R.17 E.,
at bridge on county road, 4 miles west of Reed Point.

Drainage area.--32.5 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 4, 1959. Altitude of gage is
3,820 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	Sept. 21, 1959	2.3	a 100
1960	May 1960	--	a 5
1961	--	--	(c)
1962	June 13, 1962	4.08	406
1963	June 14, 1963	1.97	Not determined
1964	--	--	(c)
1965	Apr. 2, 1965	2.05	Not determined
1966	Mar. 10, 1966	2.48	Not determined

133. Hump Creek near Reed Point, Mont. (6-2017)

Location.--Lat $45^{\circ}42'$, long $109^{\circ}35'$, in NE $\frac{1}{4}$ sec.35, T.1 S., R.17 E.,
at bridge on Interstate Highway 90 and U. S. Highway 10, 2 miles
west of Reed Point.

Drainage area.--7.61 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 4, 1959. Altitude of gage is
3,780 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 19, 1960	0.50	15
1961	--	--	(c)
1962	June 13, 1962	2.96	307
1963	May 12, 1963	.29	8
1964	--	(f)	<1
1965	Apr. 2, 1965	.2	5
1966	Mar. 10, 1966	.76	30

a About.

c No evidence of flow during year.

f Peak discharge did not reach bottom of gage.

134. Berry Creek near Columbus, Mont. (6-2017.5)

Location.--Lat $45^{\circ}42'$, long $109^{\circ}23'$, in NW $\frac{1}{4}$ sec.33, T.1 S., R.19 E., at bridge on county road, 8 miles northwest of Columbus.

Drainage area.--23.5 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 4, 1959. Altitude of gage is 3,700 ft (from topographic map).

Annual maximum data.--

<u>Water Year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	e July 7, 1958	4.54	620
1959	e Mar. 1, 1959	3.86	283
1960	June 15, 1960	.02	Not determined
1961	May 15, 1961	.10	Not determined
1962	July 31, 1962	6.62	Not determined
1963	June 14, 1963	2.60	Not determined
1964	Apr. 24, 1964	.53	Not determined
1965	Aug. 22, 1965	.52	Not determined
1966	Mar. 10, 1966	.31	Not determined

135. Allen Creek near Park City, Mont. (6-2051)

Location.--Lat $45^{\circ}36'$, long $109^{\circ}03'$, in NE $\frac{1}{4}$ sec.7, T.3 S., R.22 E., about 200 ft upstream from Cove Ditch flume, 7 miles west of Park City.

Drainage area.--7.17 sq mi.

Records available.--June 1961 to

Gage.--Crest-stage gage installed June 15, 1961. Altitude of gage is 3,470 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1961	e May 24, 1961	5.68	1,580
1962	Feb. 1, 1962	1.30	40
1963	June 3, 1963	.15	10
1964	--	--	(c)
1965	Apr. 2, 1965	.35	15
1966	June 19, 1966	2.40	140

c No evidence of flow during year.

e Prior to installation of gage.

136. Wets Creek near Billings, Mont. (6-2162)

Location.--Lat $45^{\circ}38'$, long $108^{\circ}24'$, in SW $\frac{1}{4}$ sec.28, T.2 S., R.27 E., at bridge on county road, 19 miles southeast of Billings.

Drainage area.--8.14 sq mi.

Records available.--May 1955 to

Gage.--Crest-stage gage installed May 26, 1955. Altitude of gage is 3,550 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	Aug. 25, 1955	--	a 5
1956	Feb. 22, 1956	3.23	65
1957	June 8, 1957	1.66	62
1958	July 2, 1958	.50	14
1959	June 4, 1959	1.14	39
1960	May 2, 1960	2.50	110
1961	May 21, 1961	.40	10
1962	Mar. 9, 1962	1.92	76
1963	June 8, 1963	2.7	125
1964	Apr. 26, 1964	6.9	565
1965	June 25, 1965	2.20	95
1966	Mar. 9, 1966	4.18	250

137. West Buckeye Creek near Billings, Mont. (6-2163)

Location.--Lat $45^{\circ}39'$, long $108^{\circ}24'$, in NE $\frac{1}{4}$ sec.21, T.2 S., R.27 E., 2,000 ft upstream from bridge on county road, 17 miles southeast of Billings.

Drainage area.--1.54 sq mi.

Records available.--May 1955 to

Gage.--Crest-stage gage installed May 26, 1955. Altitude of gage is 3,500 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	Aug. 25, 1955	1.54	17
1956	May 29, 1956	2.24	92
1957	May 12, 1957	1.81	185
1958	July 2, 1958	1.31	83
1959	June 4, 1959	.68	15
1960	May 2, 1960	1.16	60
1961	May 24, 1961	.80	22
1962	Mar. 9, 1962	1.03	44
1963	June 20, 1963	1.37	a 30
1964	Apr. 26, 1964	4.48	215
1965	Apr. 2, 1965	3.38	135
1966	Mar. 10, 1966	3.8	225

138. Pryor Creek near Billings, Mont. (6-2165)

Location.--Lat $45^{\circ}43'$, long $108^{\circ}19'$, in sec.30, T.1 S., R.28 E.,
at bridge on Interstate Highway 90 and U. S. Highway 87, 11 miles
southeast of Billings.

Drainage area.--435 sq mi.

Records available.--September 1911 to September 1924 and March 1938
to December 1953 (continuous record), May 1955 to

Gage.--Crest-stage gage installed May 26, 1955. Wire-weight gage
September 1911 to September 1924 and March 1938 to December 1953.
Altitude of gage is 3,310 ft (by barometer).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1912	July 3, 1912	11.2	d 930
1913	a Mar. 20, 1913	12.54	1,130
1914	June 26, 1914	9.3	d 595
1915	June 12, 1915	9.7	d 645
1916	May 22, 1916	7.01	d 333
1917	June 5, 1917	10.44	d 750
1918	Mar. 27, 1918	8.35	d 480
1919	Aug. 2, 1919	7.30	d 344
1920	May 12, 1920	10.37	d 740
1921	June 9, 1921	9.60	d 635
1922	May 11, 1922	7.65	d 400
1923	Sept. 30, 1923	9.25	d 590
1924	Apr. 4, 1924	10.04	d 705
1938	June 24, 1938	7.9	1,230
1939	June 18, 1939	3.35	d 332
1940	Apr. 16, 1940	2.83	d 208
1941	Sept. 8, 1941	4.68	d 607
1942	May 14, 1942	9.2	1,500
1943	Mar. 26, 1943	--	h 1,000
1944	June 19, 1944	7.66	d 1,150
1945	June 11, 1945	4.80	625
1946	June 12, 1946	3.98	d 489
1947	Mar. 19, 1947	--	h 890
1948	Apr. 20, 1948	3.95	d 464
1949	June 3, 1949	2.22	d 133
1950	Feb. 25, 1950	--	h 230
1951	Mar. 22, 1951	b 9.82	d 761
1952	May 22, 1952	4.25	d 424
1953	June 7, 1953	2.43	d 145
1954	--	--	Unknown
1955	June 16, 1955	3.44	286
1956	Feb. 22, 1956	b 9.12	a 800
1957	June 8, 1957	6.14	825
1958	Feb. 20, 1958	3.26	262
1959	Mar. 2, 1959	4.65	508
1960	May 2, 1960	9.9	1,700
1961	Sept. 20, 1961	3.44	288
1962	Mar. 9, 1962	6.20	840
1963	Apr. 28, 1963	8.40	1,330
1964	Apr. 26, 1964	15.04	3,720
1965	Apr. 2, 1965	7.09	1,040
1966	Mar. 11, 1966	8.84	1,440

a About.

b Backwater from ice or beaver dam.

d Maximum observed.

h Maximum daily.

139. Crooked Creek tributary near Shepherd, Mont. (6-2177)

Location.--Lat $46^{\circ}04'$, long $108^{\circ}30'$, in SW $\frac{1}{4}$ sec.21, T.4 N., R.26 E., at bridge on county road, 1.7 miles west of U. S. Highway 87 between Billings and Roundup, 12 miles northwest of Shepherd, and 20 miles north of Billings.

Drainage area.--7.21 sq mi.

Records available.--June 1962 to

Gage.--Crest-stage gage installed Apr. 22, 1963. Altitude of gage is 3,400 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e June 4, 1962	13.68	5,120
1963	June 21, 1963	5.26	1,110
1964	June 18, 1964	1.76	a 150
1965	June 25, 1965	--	47
1966	Mar. 8, 1966	3.54	Not determined

140. Yellowstone River tributary No. 2 near Pompeys Pillar, Mont. (6-2178)

Location.--Lat $46^{\circ}02'$, long $107^{\circ}48'$, in NW $\frac{1}{4}$ sec.6, T.3 N., R.32 E., at culvert on Interstate Highway 94 and U. S. Highways 10 and 312, 0.7 mile west of Spring Creek, 8 miles east of Pompeys Pillar, and 13 miles west of Custer.

Drainage area.--0.70 sq mi.

Records available.--May 1962 to

Gage.--Crest-stage gage installed Apr. 28, 1963. Altitude of gage is 2,850 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e May 13, 1962	a 1.5	Not determined
1963	--	--	(c)
1964	--	--	(c)
1965	--	--	(c)
1966	Mar. 14, 1966	.20	Not determined

a About.

c No evidence of flow during year.

e Prior to installation of gage.

141. Andresen Coulee near Custer, Mont. (6-2944)

Location.--Lat $46^{\circ}04'$, long $107^{\circ}33'$, in center $W\frac{1}{2}$ sec.30, T.4 N., R.34 E., at culvert on State Highway 47, $4\frac{1}{2}$ miles south of Custer, and 5.3 road miles south of U. S. Highways 10 and 312.

Drainage area.--2.35 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 27, 1963. Altitude of gage is 2,820 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	June 4, 1963	1.57	Not determined
1964	June 18, 1964	1.06	Not determined
1965	Aug. 23, 1965	.87	Not determined
1966	Mar. 9, 1966	--	a 5

142. Unknown Creek near Bighorn, Mont. (6-2948)

Location.--Lat $46^{\circ}12'$, long $107^{\circ}25'$, in $SE\frac{1}{4}$ sec.12, T.5 N., R.34 E., at bridge on Interstate Highway 94 and U. S. Highways 10 and 312, 4 miles east of Bighorn.

Drainage area.--14.6 sq mi.

Records available.--May 1962 to

Gage.--Crest-stage gage installed Apr. 27, 1963. Altitude of gage is 2,690 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e May 13, 1962	3.98	a 800
1963	June 4, 1963	3.60	657
1964	June 18, 1964	2.73	a 370
1965	July 19, 1965	3.48	610
1966	Mar. 9, 1966	b 2.33	a 50

a About.

b Backwater from ice.

e Prior to installation of gage.

143. Buckingham Coulee near Myers, Mont. (6-2948.5)

Location.--Lat $46^{\circ}14'$, long $107^{\circ}17'$, in SW $\frac{1}{4}$ sec.25, T.6 N., R.35 E.,
at bridge on Interstate Highway 94 and U. S. Highways 10 and 312,
3 miles southeast of Myers, and 5 miles southwest of Hysham.

Drainage area.--2.63 sq mi.

Records available.--May 1962 to

Gage.--Crest-stage gage installed Apr. 27, 1963. Altitude of gage
is 2,820 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e May 13, 1962	1.10	20
1963	June 4, 1963	.50	6
1964	June 18, 1964	2.20	122
1965	July 9, 1965	3.84	398
1966	Mar. 9, 1966	b 1.84	a 40

144. Middle Fork Froze to Death Creek tributary near Ingomar, Mont.
(6-2949)

Location.--Lat $46^{\circ}35'$, long $107^{\circ}24'$, in NE $\frac{1}{4}$ sec.35, T.10 N., R.34 E.,
at culverts on U. S. Highway 12, 1.1 miles west of Ingomar.

Drainage area.--1.36 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed May 16, 1963. Altitude of gage
is 2,990 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e July 16, 1962	9.08	463
1963	June 21, 1963	1.30	44
1964	June 18, 1964	1.95	65
1965	July 10, 1965	5.44	300
1966	July 15, 1966	1.55	52

a About.

b Backwater from ice.

e Prior to installation of gage.

145. Yellowstone River tributary No. 3 near Forsyth, Mont.
(6-2950.2)

Location.--Lat $46^{\circ}18'$, long $106^{\circ}40'$, in NW $\frac{1}{4}$ sec.12, T.6 N., R.40 E.,
at bridge on county road, 2.4 road miles northeast of U. S. High-
way 12, and 2 miles north of Forsyth.

Drainage area.--4.38 sq mi.

Records available.--June 1962 to

Gage.--Crest-stage gage installed Apr. 27, 1963. Altitude of gage
is 2,550 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e June 15, 1962	4.84	406
1963	June 19, 1963	1.30	20
1964	Aug. 29, 1964	1.67	35
1965	July 12, 1965	6.64	938
1966	June 4, 1966	6.20	790

146. Little Porcupine Creek near Forsyth, Mont. (6-2950.5)

Location.--Lat $46^{\circ}18'$, long $106^{\circ}34'$, in NE $\frac{1}{4}$ sec.3, T.6 N., R.41 E.,
at bridge on county road, 6 miles northeast of Forsyth.

Drainage area.--61 $\frac{1}{4}$ sq mi.

Records available.--May 1958 to

Gage.--Crest-stage gage installed May 9, 1958. Altitude of gage is
2,480 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	June 3, 1958	4.9	1,480
1959	Mar. 20, 1959	7.08	2,650
1960	Mar. 20, 1960	7.17	2,700
1961	Sept. 20, 1961	8.14	3,320
1962	June 15, 1962	4.53	1,310
1963	June 3, 1963	5.98	2,030
1964	Apr. 27, 1964	2.75	680
1965	Apr. 1, 1965	9.00	3,750
1966	July 2, 1966	4.57	1,350

e Prior to installation of gage.

147. Rosebud Creek near Kirby, Mont. (6-2951)

Location.--Lat $45^{\circ}14'$, long $106^{\circ}57'$, in NE $\frac{1}{4}$ sec.16, T.7 S., R.39 E., at culvert on private road, 7 miles south of Kirby.

Drainage area.--34.2 sq mi.

Records available.--April 1959 to

Gage.--Crest-stage gage installed Apr. 15, 1959. Altitude of gage is 4,180 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 19, 1960	1.78	55
1961	--	--	(c)
1962	June 16, 1962	1.45	44
1963	Apr. 28, 1963	2.67	85
1964	Apr. 26, 1964	2.24	60
1965	Apr. 1, 1965	b 4.78	a 300
1966	June 22, 1966	2.50	78

148. Rosebud Creek tributary near Busby, Mont. (6-2951.3)

Location.--Lat $46^{\circ}35'$, long $106^{\circ}52'$, in NE $\frac{1}{4}$ sec.13, T.3 S., R.39 E., at bridge on U. S. Highway 212, 1.1 miles east of Two Moon Creek, 6 miles northeast of Busby.

Drainage area.--1.14 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 23, 1963. Altitude of gage is 3,310 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	--	--	(c)
1964	June 18, 1964	1.31	Not determined
1965	Aug. 21, 1965	1.23	Not determined
1966	Mar. 11, 1966	b .81	a 1

a About.

b Backwater from ice.

c No evidence of flow during year.

149. Ridgewalker Creek near Busby, Mont. (6-2951.5)

Location.--Lat $45^{\circ}36'$, long $106^{\circ}49'$, in NE $\frac{1}{4}$ sec.8, T.3 S., R.40 E., at bridge on State Highway 8, 8 miles east of Busby.

Drainage area.--2.24 sq mi.

Records available.--April 1959 to September 1962 (discontinued).

Gage.--Crest-stage gage installed Apr. 15, 1959. Altitude of gage is 3,300 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	March 1959	--	<5
1960	Mar. 20, 1960	0.83	Unknown
1961	July 20, 1961	.40	Unknown
1962	July 27, 1962	1.40	Unknown

150. Whitedirt Creek near Lame Deer, Mont. (6-2952)

Location.--Lat $45^{\circ}36'$, long $106^{\circ}44'$, in NE $\frac{1}{4}$ sec.2, T.3 S., R.40 E., at bridge on county road, $4\frac{1}{2}$ miles west of Lame Deer.

Drainage area.--1.58 sq mi.

Records available.--April 1959 to

Gage.--Crest-stage gage installed Apr. 15, 1959. Altitude of gage is 3,290 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	March 1959	--	a 5
1960	Mar. 20, 1960	0.59	3
1961	Sept. 10, 1961	.32	2
1962	February 1962	.53	3
1963	June 3, 1963	1.38	31(revised)
1964	June 8, 1964	1.43	33(revised)
1965	July 1, 1965	.86	8(revised)
1966	Sept. 12, 1966	1.37	30

a About.

151. Rosebud Creek near Forsyth, Mont. (6-2960)

Location.--Lat $46^{\circ}11'50''$, long $106^{\circ}28'25''$, in SW $\frac{1}{4}$ sec.9, T.5 N., R.42 E., 10 miles southeast of Forsyth.

Drainage area.--1,260 sq mi.

Records available.--May 1947 to December 1953 (continuous record), July 1955 to

Gage.--Water-stage recorder re-installed July 15, 1955. Altitude of gage is 2,540 ft (by barometer).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1948	July 21, 1948	8.41	382
1949	Mar. 8, 1949	8.96	418
1950	June 9, 1950	7.90	250
1951	Sept. 1, 1951	8.42	280
1952	Mar. 29, 1952	7.81	269
1953	May 30, 1953	10.27	d 596
1954	--	--	Unknown
1955	--	--	<50
1956	March 1956	8.78	a 350
1957	June 17, 1957	8.78	342
1958	March 1958	--	Not determined
1959	Mar. 3, 1959	--	a 570
1960	March 1960	--	Unknown
1961	Sept. 10, 1961	9.58	435
1962	June 7, 1962	9.16	378
1963	June 16, 1963	6.58	182
1964	June 19, 1964	9.49	420
1965	Apr. 1, 1965	10.42	a 600
1966	June 4, 1966	7.07	215

a About.

d Maximum observed.

152. Snell Creek near Hathaway, Mont. (6-2961)

Location.--Lat $46^{\circ}18'$, long $106^{\circ}09'$, in NW $\frac{1}{4}$ sec.7, T.6 N., R.45 E., at bridge on old U. S. Highways 10 and 12, $2\frac{1}{2}$ miles northeast of Hathaway, and about 3 miles southwest of Cottonwood Creek.

Drainage area.--10.5 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 26, 1963. Altitude of gage is 2,550 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	June 3, 1963	1.69	a 170
1964	Aug. 29, 1964	.30	1
1965	June 14, 1965	2.20	a 340
1966	June 4, 1966	2.35	a 380

153. Spring Creek near Decker, Mont. (6-3069)

Location.--Lat $45^{\circ}05'$, long $106^{\circ}50'$, in NW $\frac{1}{4}$ sec.33, T.8 S., R.40 E., at bridge on county road, 5 miles north of Decker.

Drainage area.--36.3 sq mi.

Records available.--May 1958 to

Gage.--Crest-stage gage installed May 9, 1958. Altitude of gage is 3,500 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	June 7, 1958	3.4	184
1959	Mar. 17, 1959	1.19	45
1960	Mar. 19, 1960	1.31	49
1961	--	--	(c)
1962	June 16, 1962	6.59	Not determined
1963	June 15, 1963	1.07	40
1964	Apr. 22, 1964	.05	15
1965	Aug. 21, 1965	2.61	362
1966	Sept. 26, 1966	.11	a 15

a About.

c No evidence of flow during year.

154. Leaf Rock Creek near Kirby, Mont. (6-3069.5)

Location.--Lat 45°11', long 106°55', in center sec.35, T.7 S., R.39 E., at culvert on county road, 10 miles south of Kirby.

Drainage area.--6.04 sq mi.

Records available.--April 1959 to

Gage.--Crest-stage gage installed Apr. 15, 1959. Altitude of gage is 3,950 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	e June 7, 1958	6.77	222
1959	--	--	Unknown
1960	Mar. 19, 1960	5.03	168
1961	--	--	(c)
1962	June 16, 1962	6.37	216
1963	June 15, 1963	6.77	222
1964	Apr. 6, 1964	1.17	30
1965	Apr. 1, 1965	1.62	45
1966	July 12, 1966	3.42	123

155. Spring Creek near Ashland, Mont. (6-3076.4)

Location.--Lat 45°33', long 106°17', in NW $\frac{1}{4}$ sec.27, T.3 S., R.44 E., at culvert on county road along east side of Tongue River, 3.3 road miles south of U. S. Highway 212, 3 miles south of Ashland.

Drainage area.--1.48 sq mi.

Records available.--June 1962 to

Gage.--Crest-stage gage installed Apr. 24, 1963. Altitude of gage is 2,980 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e June 16, 1962	4.12	110
1963	July 5, 1963	6.90	148
1964	June 18, 1964	b 1.60	a 30
1965	July 12, 1965	6.8	215
1966	June 22, 1966	2.98	80

a About.

b Backwater from ice or debris.

c No evidence of flow during year.

e Prior to installation of gage.

156. Walking Horse Creek near Ashland, Mont. (6-3076.6)

Location.--Lat $45^{\circ}36'$, long $106^{\circ}17'$, in NW $\frac{1}{4}$ sec.3, T.3 S., R.44 E., at culvert on county road along west side of Tongue River, 1.3 road miles north of U. S. Highway 212, and $1\frac{1}{2}$ miles northwest of Ashland.

Drainage area.--2.79 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 24, 1963. Altitude of gage is 2,950 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	--	--	(c)
1964	--	--	(c)
1965	July 1, 1965	0.50	Not determined
1966	--	--	(c)

157. Stebbins Creek near Ashland, Mont. (6-3077.6)

Location.--Lat $45^{\circ}37'$, long $106^{\circ}25'$, in center of sec.34, T.2 S., R.43 E., at culvert on U. S. Highway 212, 7.5 road miles west of Ashland.

Drainage area.--5.41 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 23, 1963. Altitude of gage is 3,400 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	Apr. 4, 1963	0.1	Not determined
1964	Apr. 6, 1964	.20	Not determined
1965	Aug. 23, 1965	1.59	Not determined
1966	Mar. 11, 1966	b 1.85	a 2

a About.

b Backwater from ice.

c No evidence of flow during year.

158. Stebbins Creek at mouth, near Ashland, Mont. (6-3077.8)

Location.--Lat $45^{\circ}38'$, long $106^{\circ}18'$, in NW $\frac{1}{4}$ sec.27, T.2 S., R.44 E., at bridge on county road along west side of Tongue River, 3.6 road miles north of U. S. Highway 212, $3\frac{1}{2}$ miles northwest of Ashland.

Drainage area.--20.8 sq mi.

Records available.--April 1963 to

Gage.--Crest-stage gage installed Apr. 24, 1963. Altitude of gage is 2,950 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	June 15, 1963	2.44	Not determined
1964	June 18, 1964	3.40	Not determined
1965	Aug. 23, 1965	3.56	Not determined
1966	Mar. 12, 1966	b 1.85	a 15

159. Basin Creek tributary near Volborg, Mont. (6-3082)

Location.--Lat $45^{\circ}53'$, long $105^{\circ}40'$, in NW $\frac{1}{4}$ sec.31, T.2 N., R.49 E., at culvert on county road, $3\frac{1}{2}$ miles north of Volborg.

Drainage area.--0.14 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 23, 1955. Altitude of gage is 2,900 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	July 29, 1955	0.24	20
1956	--	--	(c)
1957	--	--	(c)
1958	July 2, 1958	6.96	390
1959	March 1959	--	a 2
1960	Mar. 21, 1960	.97	12
1961	--	--	(c)
1962	June 17, 1962	2.76	36
1963	June 22, 1963	9.38	94
1964	June 18, 1964	1.07	14
1965	Apr. 1, 1965	1.41	18
1966	July 29, 1966	3.11	41

a About.

b Backwater from ice.

c No evidence of flow during year.

160. Basin Creek near Volborg, Mont. (6-3083)

Location.--Lat $45^{\circ}53'$, long $105^{\circ}39'$, in NW $\frac{1}{4}$ sec.32, T.2 N., R.49 E.,
at bridge on U. S. Highway 212, 4 miles north of Volborg.
rainage area.--10.9 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 23, 1955. Altitude of gage
is 2,850 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	July 29, 1955	1.1	20
1956	Aug. 27, 1956	5.76	953
1957	Apr. 24, 1957	3.45	300
1958	July 2, 1958	5.79	965
1959	Mar. 11, 1959	1.87	75
1960	Mar. 21, 1960	5.26	770
1961	Sept. 10, 1961	1.04	18
1962	Feb. 11, 1962	3.18	250
1963	June 22, 1963	5.69	920
1964	June 18, 1964	2.48	145
1965	Apr. 1, 1965	3.93	400
1966	July 29, 1966	2.32	125

161. North Fork Sunday Creek tributary at Rock Springs, Mont.
(6-3090.2)

Location.--Lat $46^{\circ}49'$, long $106^{\circ}15'$, in SE $\frac{1}{4}$ sec.1, T.12 N., R.43 E.,
at culverts on State Highway 22, 0.4 mile northwest of Rock
Springs.

Drainage area.--1.19 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 17, 1963. Altitude of gage is
2,970 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	--	--	(c)
1964	June 18, 1964	0.38	3
1965	July 11, 1965	1.76	23
1966	Mar. 13, 1966	2.74	38

c No evidence of flow during year.

162. Dry House Creek near Angela, Mont. (6-3090.4)

Location.--Lat $46^{\circ}41'$, long $106^{\circ}10'$, in NE $\frac{1}{4}$ sec.27, T.11 N., R.44 E., near bridge on State Highway 22, 3.2 miles south of Angela.

Drainage area.--35.6 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 17, 1963. Altitude of gage is 2,760 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	June 4, 1963	3.60	380
1964	June 18, 1964	3.18	280
1965	Apr. 1, 1965	4.13	500
1966	Mar. 19, 1966	b 2.08	a 10

163. North Fork Sunday Creek tributary No. 2 near Angela, Mont. (6-3090.6)

Location.--Lat $46^{\circ}34'$, long $106^{\circ}04'$, in NE $\frac{1}{4}$ sec.4, T.9 N., R.45 E., at culvert on State Highway 22, 14.1 road miles northwest of Yellowstone River bridge at Miles City, 15 miles northwest of Miles City, and 13 miles southeast of Angela.

Drainage area.--0.34 sq mi.

Records available.--June 1962 to

Gage.--Crest-stage gage installed May 17, 1963. Altitude of gage is 2,680 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e June 1, 1962	2.42	45
1963	June 3, 1963	5.20	158
1964	June 18, 1964	1.47	19
1965	July 11, 1965	4.89	144
1966	Mar. 19, 1966	4.56	130

a About.

b Backwater from ice.

e Prior to installation of gage.

164. Deep Creek near Kinsey, Mont. (6-3090.8)

Location.--Lat $46^{\circ}33'$, long $105^{\circ}38'$, in SW $\frac{1}{4}$ sec.12, T.9 N., R.48 E., at culvert on Interstate Highway 94 and U. S. Highway 10, 3.1 miles southwest of Shirley railroad station, 2 miles southeast of Kinsey, and 13 miles northeast of Miles City.

Drainage area.--11.1 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed May 16, 1963. Altitude of gage is 2,320 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e July 14, 1962	7.80	828
1963	June 5, 1963	16.77	2,420
1964	Aug. 29, 1964	13.83	1,830
1965	July 11, 1965	10.79	1,300
1966	June 3, 1966	3.61	260

165. Meadow Creek near Locate, Mont. (6-3090.9)

Location.--Lat $46^{\circ}22'$, long $105^{\circ}30'$, in center of N $\frac{1}{2}$ sec.17, T.7 N., R.50 E., at wooden culvert on State Secondary 333 between U. S. Highway 12 and Mizpah, 3.2 road miles southeast of U. S. Highway 12, and 10 miles southwest of Locate.

Drainage area.--6.67 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed Apr. 24, 1963. Altitude of gage is 3,040 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e July 14, 1962	8.6	1,400
1963	June 21, 1963	.31	Not determined
1964	Aug. 29, 1964	1.60	Not determined
1965	Apr. 1, 1965	2.96	Not determined
1966	Mar. 14, 1966	.80	Not determined

e Prior to installation of gage.

166. Sand Creek near Broadus, Mont. (6-3247)

Location.--Lat $45^{\circ}26'$, long $105^{\circ}26'$, in SE $\frac{1}{4}$ sec.5, T.5 S., R.51 E., at culverts on Moorhead road, 1.8 miles southwest of Broadus.

Drainage area.--10.6 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 22, 1955. Altitude of gage is 3,090 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	--	--	(c)
1956	Mar. 16, 1956	1.75	19
1957	Aug. 28, 1957	1.55	15
1958	June 7, 1958	3.95	93
1959	Mar. 18, 1959	4.79	252
1960	Mar. 20, 1960	b 4.78	a 150
1961	--	--	(c)
1962	June 11, 1962	2.85	50
1963	Feb. 5, 1963	2.00	23
1964	June 8, 1964	1.58	13
1965	Apr. 1, 1965	2.96	53
1966	July 29, 1966	1.27	7

167. Meyers Creek near Locate, Mont. (6-3264)

Location.--Lat $46^{\circ}23'$, long $105^{\circ}17'$, in SE $\frac{1}{4}$ sec.1, T.7 N., R.51 E., at culvert on county road on east side of Powder River, 3.4 road miles south of U. S. Highway 12, and 3 miles southeast of Locate.

Drainage area.--9.58 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed Apr. 25, 1963. Altitude of gage is 2,520 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e July 14, 1962	7.79	500
1963	June 6, 1963	8.24	1,370
1964	Aug. 29, 1964	6.62	200
1965	Apr. 1, 1965	5.00	150
1966	Mar. 14, 1966	1.70	55

a About.

b Backwater from ice.

c No evidence of flow during year.

e Prior to installation of gage.

168. O'Fallon Creek near Ismay, Mont. (6-3266)

Location.--Lat $46^{\circ}25'$, long $104^{\circ}46'$, near center of east edge of sec.30, T.8 N., R.56 E., at bridge on U. S. Highway 12, $11\frac{1}{2}$ miles west of Plevna, 1 mile east of road to Ismay, and $6\frac{1}{2}$ miles southeast of Ismay.

Drainage area.--669 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed Apr. 26, 1963. Altitude of gage is 2,590 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>		<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e	July 14, 1962	7.23	Not determined
1963		June 7, 1963	4.12	Not determined
1964		June 18, 1964	4.20	Not determined
1965		July 12, 1965	7.27	Not determined
1966		July 26, 1966	5.07	Not determined

169. O'Fallon Creek tributary near Ismay, Mont. (6-3266.5)

Location.--Lat $46^{\circ}25'$, long $104^{\circ}44'$, in SE $\frac{1}{4}$ sec.29, T.8 N., R.56 E., at culvert on U. S. Highway 12, 2 miles east of road to Ismay, 1 mile east of O'Fallon Creek bridge, and 7 miles southeast of Ismay.

Drainage area.--0.17 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed Apr. 25, 1963. Altitude of gage is 2,750 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>		<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e	July 14, 1962	3.64	49
1963		June 7, 1963	5.26	59
1964		June 18, 1964	5.27	59
1965		July 12, 1965	3.36	47
1966		July 26, 1966	4.33	54

e Prior to installation of gage.

170. Deep Creek near Baker, Mont. (6-3267)

Location.--Lat $46^{\circ}18'$, long $104^{\circ}18'$, in SW $\frac{1}{4}$ sec.2, T.6 N., R.59 E., at culverts on State Highway 7, 5.0 road miles south of U. S. Highway 12 in Baker, and 5 miles south of Baker.

Drainage area.--1.55 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed Apr. 25, 1963. Altitude of gage is 3,080 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e July 7, 1962	2.64	Not determined
1963	July 11, 1963	2.55	Not determined
1964	June 8, 1964	3.90	Not determined
1965	July 12, 1965	3.29	Not determined
1966	July 13, 1966	3.87	Not determined

171. Pennel Creek near Baker, Mont. (6-3268)

Location.--Lat $46^{\circ}29'$, long $104^{\circ}14'$, in center of south edge of sec.36, T.9 N., R.59 E., at culvert on State Highway 7, 7.8 miles north of U. S. Highway 12 in Baker, and 8 miles north of Baker.

Drainage area.--1.00 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed Apr. 25, 1963. Altitude of gage is 3,090 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e July 7, 1962	6.0	240
1963	June 5, 1963	8.51	350
1964	June 18, 1964	1.94	85
1965	Apr. 9, 1965	1.98	88
1966	June 4, 1966	2.28	97

e Prior to installation of gage.

172. Yellowstone River tributary No. 4 near Fallon, Mont. (6-3269)

Location.--Lat $46^{\circ}52'$, long $105^{\circ}06'$, in SW $\frac{1}{4}$ sec.23, T.13 N., R.52 E., at culvert on Interstate Highway 94 and U. S. Highway 10, 0.5 mile northeast of the north end of the Yellowstone River bridge near Fallon, and 2 miles north of Fallon.

Drainage area.--0.67 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed May 17, 1963. Altitude of gage is 2,250 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e July 14, 1962	9.58	338
1963	June 6, 1963	.67	a 40
1964	June 8, 1964	1.05	55
1965	July 12, 1965	1.36	60
1966	--	--	(c)

173. Yellowstone River tributary No. 5 near Marsh, Mont.
(6-3269.5)

Location.--Lat $46^{\circ}57'$, long $104^{\circ}54'$, in SW $\frac{1}{4}$ sec.21, T.14 N., R.54 E., at culvert on Interstate Highway 94 and U. S. Highway 10, 2.4 miles northeast of Cracker Box Creek, 2.5 miles southwest of Clear Creek, and 5 miles northeast of Marsh.

Drainage area.--0.87 sq mi.

Records available.--July 1962 to

Gage.--Crest-stage gage installed May 17, 1963. Altitude of gage is 2,300 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e July 14, 1962	2.97	127
1963	June 6, 1963	1.40	Not determined
1964	June 8, 1964	.70	Not determined
1965	Apr. 1, 1965	b 2.81	a 10
1966	June 4, 1966	1.68	Not determined

a About.

b Backwater from ice.

e Prior to installation of gage.

174. Krug Creek tributary near Wibaux, Mont. (6-3277)

Location.--Lat $47^{\circ}01'$, long $104^{\circ}19'$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.36, T.15 N., R.58 E., at culvert on Interstate Highway 94 and U. S. Highway 10, 8 miles northwest of Wibaux.

Drainage area.--1.74 sq mi.

Records available.--June 1955 to September 1961 (discontinued).

Gage.--Crest-stage gage installed June 30, 1955. Altitude of gage is 2,720 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	--	--	(c)
1956	March 1956	0.23	1
1957	Mar. 20, 1957	1.61	18
1958	July 3, 1958	2.70	49
1959	Mar. 18, 1959	.60	3
1960	June 12, 1960	3.00	70
1961	--	--	(c)

175. Griffith Creek near Glendive, Mont. (6-3278)

Location.--Lat $47^{\circ}06'$, long $104^{\circ}34'$, in NE $\frac{1}{4}$ sec.36, T.16 N., R.56 E., near bridge on Interstate Highway 94 and U. S. Highway 10, 8 miles east of Glendive.

Drainage area.--15.5 sq mi.

Records available.--June 1955 to September 1963, June 1965 to

Gage.--Crest-stage gage installed June 30, 1955. Altitude of gage is 2,220 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	July 28, 1955	1.80	a 100
1956	Mar. 19, 1956	.86	a 80
1957	Mar. 20, 1957	.27	50
1958	July 3, 1958	.55	101
1959	Mar. 17, 1959	.74	157
1960	Mar. 20, 1960	1.41	Not determined
1961	June 29, 1961	3.96	Not determined
1962	June 6, 1962	.82	21
1963	June 22, 1963	1.70	Not determined
1965	June 16, 1965	--	14,600
1966	Mar. 11, 1966	--	a 150

a About.

c No evidence of flow during year.

176. Linden Creek at Intake, Mont. (6-3287)

Location.--Lat $47^{\circ}18'$, long $104^{\circ}31'$, in NE $\frac{1}{4}$ sec.25, T.18 N., R.56 E., at bridge on State Highway 16, three-quarters of a mile north-east of Intake.

Drainage area.--5.01 sq mi.

Records available.--March 1958 to

Gage.--Crest-stage gage installed Mar. 11, 1958. Altitude of gage is 2,080 ft (from topographic map).

Cooperation.--Montana Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	July 3, 1958	0.98	Not determined
1959	Sept. 21, 1959	1.54	Not determined
1960	June 21, 1960	1.35	Not determined
1961	--	--	(c)
1962	June 15, 1962	1.46	Not determined
1963	Feb. 5, 1963	2.38	Not determined
1964	--	--	(c)
1965	June 16, 1965	1.63	Not determined
1966	July 2, 1966	1.11	Not determined

177. Indian Creek at Intake, Mont. (6-3288)

Location.--Lat $47^{\circ}17'$, long $104^{\circ}32'$, in SW $\frac{1}{4}$ sec.25, T.18 N., R.56 E., at culvert on State Highway 16, 500 ft northeast of Intake.

Drainage area.--0.45 sq mi.

Records available.--March 1958 to

Gage.--Crest-stage gage installed Mar. 11, 1958. Altitude of gage is 2,090 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	July 3, 1958	3.23	Not determined
1959	Sept. 21, 1959	3.28	Not determined
1960	Mar. 20, 1960	.60	Not determined
1961	Mar. 13, 1961	1.04	Not determined
1962	Aug. 10, 1962	2.93	Not determined
1963	Feb. 5, 1963	1.83	Not determined
1964	June 8, 1964	2.08	Not determined
1965	June 16, 1965	3.18	Not determined
1966	July 2, 1966	2.40	Not determined

c No evidence of flow during year.

178. War Dance Creek near Intake, Mont. (6-3289)

Location.--Lat $47^{\circ}20'$, long $104^{\circ}29'$, in SW $\frac{1}{4}$ sec.8, T.18 N., R.57 E., at culvert on State Highway 16, $3\frac{1}{2}$ miles northeast of Intake.

Drainage area.--4.31 sq mi.

Records available.--March 1958 to

Gage.--Crest-stage gage installed Mar. 11, 1958. Altitude of gage is 2,080 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	--	--	(c)
1959	Mar. 17, 1959	1.96	Not determined
1960	Mar. 20, 1960	1.83	Not determined
1961	--	--	(c)
1962	June 6, 1962	.94	Not determined
1963	Feb. 5, 1963	-.22	0.4
1964	--	--	(c)
1965	June 16, 1965	.81	Not determined
1966	--	--	(c)

179. First Hay Creek near Sidney, Mont. (6-3295.7)

Location.--Lat $47^{\circ}50'$, long $104^{\circ}16'$, in SE $\frac{1}{4}$ sec.16, T.24 N., R.58 E., at bridge on State Highway 16, 4.1 road miles north of "Dryland Crop and Soils Research Station" sign, and 10 miles northwest of Sidney.

Drainage area.--30.0 sq mi.

Records available.--May 1963 to

Gage.--Crest-stage gage installed May 20, 1963. Altitude of gage is 2,170 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1963	Aug. 23, 1963	1.02	Not determined
1964	July 5, 1964	.90	Not determined
1965	Apr. 8, 1965	--	a 100
1966	March 1966	2.15	Not determined

a About.

c No evidence of flow during year.

180. North Creek near Alzada, Mont. (6-3329)

Location.--Lat $45^{\circ}04'$, long $104^{\circ}31'$, in $SE\frac{1}{4}NW\frac{1}{4}$ sec.7, T.9 S., R.59 E., 8 miles northwest of Alzada.

Drainage area.--0.68 sq mi.

Records available.--May to September 1951 (continuous record), July 1955 to

Gage.--Water-stage recorder re-installed July 21, 1955. Altitude of gage is 3,480 ft (by barometer).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1951	June 17, 1951	5.18	260
1955	--	--	(c)
1956	July 2, 1956	4.32	276
1957	Aug. 28, 1957	4.32	276
1958	June 3, 1958	4.66	417
1959	June 30, 1959	3.21	58
1960	Aug. 17, 1960	3.77	142
1961	Sept. 18, 1961	4.05	203
1962	May 21, 1962	5.47	a 1,100
1963	June 14, 1963	5.23	791
1964	June 22, 1964	3.22	34
1965	July 1, 1965	4.82	486
1966	July 28, 1966	2.92	15

a About.

c No evidence of flow during year.

181. Wolf Creek near Hammond, Mont. (6-3341)

Location.--Lat $45^{\circ}10'$, long $104^{\circ}45'$, in SE $\frac{1}{4}$ sec.5, T.8 S., R.57 E.,
at culvert on U. S. Highway 212, 8 miles southeast of Hammond.

Drainage area.--9.09 sq mi.

Records available.--July 1955 to

Gage.--Crest-stage gage installed July 22, 1955. Altitude of gage
is 3,590 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1955	e July 11, 1955	4.08	298
1956	Mar. 22, 1956	3.45	175
1957	Aug. 29, 1957	4.58	365
1958	June 3, 1958	5.76	550
1959	Mar. 19, 1959	3.32	154
1960	Mar. 21, 1960	5.26	485
1961	Sept. 18, 1961	2.31	30
1962	May 21, 1962	5.62	540
1963	Aug. 3, 1963	3.54	190
1964	June 22, 1964	3.85	240
1965	Aug. 22, 1965	12.38	1,170
1966	July 28, 1966	5.66	555

e Prior to installation of gage.

182. Willow Creek near Alzada, Mont. (6-3342)

Location.--Lat $45^{\circ}06'$, long $104^{\circ}35'$, in center of sec.27, T.8 S., R.58 E., near bridge on U. S. Highway 212, 11 miles northwest of Alzada.

Drainage area.--123 sq mi.

Records available.--May 1958 to

Gage.--Crest-stage gage installed May 8, 1958. Altitude of gage is 3,460 ft (from topographic map).

Cooperation.--Montana State Water Conservation Board.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	June 5, 1958	7.54	455
1959	Mar. 19, 1959	7.31	548
1960	Mar. 23, 1960	11.19	a 1,350
1961	Sept. 18, 1961	1.77	40
1962	May 21, 1962	11.98	a 1,700
1963	Aug. 3, 1963	7.28	480
1964	June 22, 1964	4.84	200
1965	Aug. 22, 1965	8.39	550
1966	July 28, 1966	4.97	220

183. North Fork Coal Bank Creek near Mill Iron, Mont.
(6-3346.4)

Location.--Lat $45^{\circ}56'$, long $104^{\circ}05'$, in SW $\frac{1}{4}$ sec.12, T.2 N., R.61 E., at bridge on county road, 5 miles south of Soda Creek tributary crest-stage gage, 11 miles southeast of Webster, and 9 miles northeast of Mill Iron.

Drainage area.--15.0 sq mi.

Records available.--May 1962 to

Gage.--Crest-stage gage installed Apr. 26, 1963. Altitude of gage is 3,040 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e May 22, 1962	4.72	Not determined
1963	July 10, 1963	2.65	Not determined
1964	June 9, 1964	1.70	Not determined
1965	Aug. 23, 1965	1.27	Not determined
1966	March 1966	b 1.90	Not determined

a About.

b Backwater from ice.

e Prior to installation of gage.

184. Soda Creek tributary near Webster, Mont. (6-3347.2)

Location.--Lat $46^{\circ}01'$, long $104^{\circ}06'$, in NE $\frac{1}{4}$ sec.23, T.3 N., R.61 E., at culvert on county road, 0.3 miles south of Soda Creek, and 8 miles southeast of Webster.

Drainage area.--2.22 sq mi.

Records available.--May 1962 to

Gage.--Crest-stage gage installed Apr. 26, 1963. Altitude of gage is 3,100 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1962	e May 22, 1962	5.19	106
1963	July 10, 1963	1.57	12
1964	Aug. 29, 1964	2.55	28
1965	July 5, 1965	1.05	7
1966	Mar. 14, 1966	1.00	9

185. Spring Creek near Wibaux, Mont. (6-3364.5)

Location.--Lat $46^{\circ}53'$, long $104^{\circ}12'$, in sec.14, T.13 N., R.59 E., near bridge on State Highway 7, 7 miles south of Wibaux.

Drainage area.--3.88 sq mi.

Records available.--June 1955 to

Gage.--Crest-stage gage installed June 29, 1955. Altitude of gage is 2,770 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1956	March 1956	0.67	61
1957	Sept. 9, 1957	1.36	127
1958	March 1958	.54	52
1959	Mar. 21, 1959	1.18	108
1960	Mar. 20, 1960	.84	76
1961	--	--	(c)
1962	July 19, 1962	3.34	438
1963	Feb. 5, 1963	.57	53
1964	July 5, 1964	.95	85
1965	Apr. 1, 1965	b 1.91	a 100
1966	Mar. 11, 1966	1.32	125

a About.

b Backwater from ice.

c No evidence of flow during year.

e Prior to installation of gage.

COLUMBIA RIVER BASIN

186. Fortine Creek near Trego, Mont. (12-3005)

Location.--Lat $48^{\circ}39'$, long $114^{\circ}55'$, in NE $\frac{1}{4}$ sec.11, T.33 N., R.26 W.,
 $5\frac{1}{2}$ miles southwest of Trego.

Drainage area.--112 sq mi.

Records available.--December 1946 to September 1953 (continuous record), 1954, May 1958 to

Gage.--Crest-stage gage installed July 1, 1959. Wire-weight gage December 1946 to September 1953. Altitude of gage is 3,340 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1947	Apr. 29, 1947	10.24	948
1948	May 22, 1948	10.46	1,000
1949	May 11, 1949	9.34	d 754
1950	May 16, 1950	11.8	1,810
1951	May 7, 1951	9.95	875
1952	Apr. 28, 1952	9.65	798
1953	May 7, 1953	9.90	860
1954	May 20, 1954	11.8	1,810
1958	May 24, 1958	10.2	a 850
1959	--	--	Unknown
1960	May 8, 1960	9.7	700
1961	May 11, 1961	a 10.0	a 700
1962	Apr. 19, 1962	8.96	540
1963	Apr. 26, 1963	6.01	360
1964	May 18, 1964	9.48	600
1965	Apr. 27, 1965	11.13	1,060
1966	May 4, 1966	8.51	500

a About.

d Maximum observed.

187. Deep Creek near Fortine, Mont. (12-3008)

Location.--Lat $48^{\circ}46'$, long $114^{\circ}53'$, in SW $\frac{1}{4}$ sec.30, T.35 N., R.25 W., at culvert on county road, $1\frac{1}{4}$ miles east of Fortine.

Drainage area.--17.9 sq mi.

Records available.--July 1959 to

Gage.--Crest-stage gage installed July 1, 1959. Altitude of gage is 3,000 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	2.8	150
1960	June 6, 1960	2.67	138
1961	May 31, 1961	2.92	161
1962	May 28, 1962	1.75	82
1963	June 22, 1963	2.26	108
1964	June 8, 1964	4.90	310
1965	May 28, 1965	3.28	180
1966	May 4, 1966	4.20	208

188. Kootenai River tributary near Rexford, Mont. (12-3017)

Location.--Lat $48^{\circ}48'$, long $115^{\circ}18'$, in SE $\frac{1}{4}$ sec.11, T.35 N., R.29 W., at culvert on State Highway 37, 7 miles southwest of Rexford.

Drainage area.--1.11 sq mi.

Records available.--July 1959 to

Gage.--Crest-stage gage installed July 1, 1959. Altitude of gage is 2,280 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	0.5	2
1960	Apr. 8, 1960	1.25	9
1961	May 12, 1961	1.28	9
1962	May 21, 1962	1.16	8
1963	May 14, 1963	.55	3
1964	May 21, 1964	1.00	7
1965	May 27, 1965	1.10	8
1966	May 4, 1966	.88	6

j Peak flow occurred sometime during period May-June.

189. Gold Creek near Rexford, Mont. (12-3018)

Location.--Lat $48^{\circ}47'$, long $115^{\circ}19'$, in NW $\frac{1}{4}$ sec.23, T.35 N., R.29 W., at culvert on State Highway 37, 8 miles southwest of Rexford.

Drainage area.--6.04 sq mi.

Records available.--July 1959 to

Gage.--Crest-stage gage installed July 1, 1959. Altitude of gage is 2,260 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	1.5	103
1960	Apr. 8, 1960	.85	55
1961	May 21, 1961	.97	64
1962	May 12, 1962	.78	50
1963	May 14, 1963	.27	22
1964	May 20, 1964	.93	61
1965	Apr. 27, 1965	.95	62
1966	May 4, 1966	.91	60

190. Little Jackson Creek near Libby, Mont. (12-3019)

Location.--Lat $48^{\circ}27'$, long $115^{\circ}19'$, in center sec.16, T.31 N., R.29 W., at culvert on State Highway 37, 12 miles northeast of Libby.

Drainage area.--2.60 sq mi.

Records available.--May 1961 to

Gage.--Crest-stage gage installed May 16, 1961. Altitude of gage is 2,180 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1961	e May 15, 1961	0.4	13
1962	--	(f)	<4
1963	February 1963	b .22	a 5
1964	--	(f)	<4
1965	April 1965	.36	12
1966	--	(f)	<4

a About.

b Backwater from ice.

e Prior to installation of gage.

f Peak did not reach bottom of gage.

j Peak flow occurred sometime during period May-June.

191. Peoples Creek near Libby, Mont. (12-3020.5)

Location.--Lat $45^{\circ}20'$, long $115^{\circ}19'$, in NW $\frac{1}{4}$ sec.28, T.30 N., R.29 W.,
at culvert on private road 12 miles east of Libby.

Drainage area.--2.65 sq mi.

Records available.--May 1961 to

Gage.--Crest-stage gage installed May 16, 1961. Altitude of gage
is 2,200 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1961	e May 15, 1961	0.3	10
1962	May 18, 1962	.05	4
1963	--	(f)	<0.5
1964	Apr. 21, 1964	-.04	1
1965	Apr. 27, 1965	.46	15
1966	May 12, 1966	.34	a 2

192. Severn Gulch near Jennings, Mont. (12-3021)

Location.--Lat $48^{\circ}22'$, long $115^{\circ}24'$, in SE $\frac{1}{4}$ sec.14, T.30 N., R.30 W.,
at culvert on private road, 3 miles west of Jennings.

Drainage area.--1.16 sq mi.

Records available.--July 1959 to May 1961 (discontinued).

Gage.--Crest-stage gage installed July 2, 1959.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	April 1960	0.03	a 1
1961	--	--	Unknown

a About.

e Prior to installation of gage.

f Peak discharge did not reach bottom of gage.

193. Tub Gulch near Libby, Mont. (12-3022)

Location.--Lat $48^{\circ}25'$, long $115^{\circ}28'$, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.29, T.31 N., R.30 W., at culvert on State Highway 37, 4 miles northeast of Libby.

Drainage area.--1.47 sq mi.

Records available.--July 1959 to May 1961 (discontinued).

Gage.--Crest-stage gage installed July 2, 1959.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	June 3, 1960	-0.18	Unknown
1961	--	--	Unknown

194. Shaughnessy Creek near Libby, Mont. (12-3024)

Location.--Lat $48^{\circ}18'$, long $115^{\circ}36'$, in W $\frac{1}{2}$ sec.5, T.29 N., R.31 W., at culvert on county road, 6 $\frac{1}{2}$ miles southwest of Libby.

Drainage area.--1.11 sq mi.

Records available.--July 1959 to

Gage.--Crest-stage gage installed July 2, 1959. Altitude of gage is 2,820 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	0.4	16
1960	--	(f)	<4
1961	Mar. 30, 1961	.73	33
1962	May 16, 1962	.67	29
1963	Apr. 4, 1963	.09	6
1964	April 1964	.39	a 16
1965	April 1965	.97	48
1966	May 4, 1966	.35	14

a About.

f Peak discharge did not reach bottom of gage.

j Peak flow occurred sometime during period May-June.

195. Whitetail Creek near Yaak, Mont. (12-3042.5)

Location.--Lat $48^{\circ}50'$, long $115^{\circ}49'$, in NE $\frac{1}{4}$ sec.1, T.35 N., R.33 W.,
500 ft upstream from mouth, 5 miles west of Yaak.

Drainage area.--2.61 sq mi.

Records available.--July 1960 to

Gage.--Crest-stage gage installed July 15, 1960. Altitude of gage
is 2,930 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	(j)	0.7	33
1961	May 1, 1961	1.02	49
1962	May 21, 1962	.45	11
1963	Apr. 4, 1963	.58	15
1964	May 22, 1964	.70	31
1965	Apr. 26, 1965	.96	42
1966	May 4, 1966	.79	23

196. Cyclone Creek near Yaak, Mont. (12-3043)

Location.--Lat $48^{\circ}45'$, long $115^{\circ}54'$, in SE $\frac{1}{4}$ sec.32, T.35 N., R.33 W.,
at bridge a quarter of a mile upstream from mouth, 10 $\frac{1}{2}$ miles south-
west of Yaak.

Drainage area.--5.66 sq mi.

Records available.--July 1960 to

Gage.--Crest-stage gage installed July 15, 1960. Altitude of gage
is 2,790 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	(j)	2.06	220
1961	May 26, 1961	1.78	172
1962	May 21, 1962	1.26	97
1963	Apr. 4, 1963	1.58	133
1964	May 22, 1964	1.94	150
1965	Apr. 27, 1965	1.38	73
1966	May 4, 1966	1.56	130

j Peak flow occurred sometime during period May-June.

197. Fourth of July Creek near Yaak, Mont. (12-3044)

Location.--Lat $48^{\circ}42'$, long $115^{\circ}52'$, in NW $\frac{1}{4}$ sec.22, T.34 N., R.33 W., at bridge 500 ft upstream from mouth, 12 miles southwest of Yaak.

Drainage area.--7.70 sq mi.

Records available.--July 1960 to

Gage.--Crest-stage gage installed July 14, 1960. Altitude of gage is 2,650 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	(j)	2.5	258
1961	May 26, 1961	2.06	196
1962	Apr. 19, 1962	1.60	138
1963	Apr. 14, 1963	.95	61
1964	May 22, 1964	2.20	190
1965	Apr. 26, 1965	1.98	165
1966	May 4, 1966	2.00	188

198. Smith Gulch near Silverbow, Mont. (12-3233)

Location.--Lat $45^{\circ}57'$, long $112^{\circ}40'$, in N $\frac{1}{2}$ sec.1, T.2 N., R.9 W., at culvert on Interstate Highway 15 and U. S. Highway 91, 4 miles south of Silverbow.

Drainage area.--4.85 sq mi.

Records available.--May 1959 to

Gage.--Crest-stage gage installed May 11, 1959. Altitude of gage is 5,510 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	--	--	a 5
1960	Mar. 21, 1960	1.97	43
1961	Sept. 11, 1961	2.41	67
1962	Apr. 14, 1962	1.70	32
1963	Feb. 4, 1963	4.91	80
1964	Mar. 30, 1964	3.04	10
1965	Dec. 23, 1964	5.75	123
1966	Mar. 30, 1966	3.04	9

a About.

j Peak flow occurred sometime during period May-June.

199. Clark Fork tributary near Drummond, Mont. (12-3247)

Location.--Lat $46^{\circ}37'$, long $113^{\circ}02'$, in SW $\frac{1}{4}$ sec.18, T.10 N., R.11 W., half a mile upstream from Interstate Highway 90 and U. S. Highway 10, $6\frac{1}{2}$ miles east of Drummond.

Drainage area.--4.61 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 17, 1959. Altitude of gage is 4,080 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	e June 9, 1958	1.64	133
1959	--	--	(c)
1960	Mar. 18, 1960	1.62	84
1961	Apr. 3, 1961	.70	20
1962	Apr. 4, 1962	.62	18
1963	Feb. 4, 1963	1.44	56
1964	Mar. 31, 1964	.98	21
1965	Feb. 5, 1965	1.53	64
1966	Mar. 9, 1966	2.00	125

200. Morris Creek near Drummond, Mont. (12-3248)

Location.--Lat $46^{\circ}40'$, long $113^{\circ}06'$, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.34, T.11 N., R.12 W., at culvert on State Secondary Highway 271, 2 miles east of Drummond.

Drainage area.--12.6 sq mi.

Records available.-- June 1959 to

Gage.--Crest-stage gage installed June 17, 1959. Altitude of gage is 4,170 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 26, 1960	1.23	14
1961	Apr. 3, 1961	.47	3
1962	Apr. 23, 1962	.65	4
1963	Mar. 21, 1963	.76	6
1964	May 20, 1964	1.06	10
1965	May 29, 1965	.83	12
1966	Mar. 29, 1966	.87	13

c No evidence of flow during year.

e Prior to installation of gage.

201. Edwards Gulch at Drummond, Mont. (12-3317)

Location.--Lat $46^{\circ}40'$, long $113^{\circ}09'$, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.29, T.11 N., R.12 W., at culvert on private road, 0.4 miles north of Interstate Highway 90 and U. S. Highway 10 at Drummond.

Drainage area.--4.69 sq mi.

Records available.--June 1959 to September 1962 (discontinued).

Gage.--Crest-stage gage installed June 17, 1959. Altitude of gage is 4,000 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Mar. 21, 1960	b 1.14	Unknown
1961	Apr. 3, 1961	.14	2
1962	Apr. 14, 1962	.55	8

202. West Twin Creek near Bonner, Mont. (12-3399)

Location.--Lat $46^{\circ}55'$, long $113^{\circ}43'$, in NW $\frac{1}{4}$ sec.2, T.13 N., R.17 W., at bridge on State Highway 20, 8 miles east of Bonner.

Drainage area.--7.47 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 17, 1959. Altitude of gage is 3,410 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	June 1959	0.7	98
1960	Apr. 6, 1960	.63	82
1961	May 27, 1961	.91	128
1962	Apr. 19, 1962	.92	92
1963	May 29, 1963	.63	63
1964	June 8, 1964	b 1.10	a 150
1965	Apr. 14, 1965	1.33	a 120
1966	May 28, 1966	.45	42

a About.

b Backwater from ice.

203. Marshall Creek near Missoula, Mont.
(12-3402)

Location.--Lat $46^{\circ}53'$, long $113^{\circ}55'$, in NW $\frac{1}{4}$ sec.18, T.13 N., R.18 W., at culvert on Interstate Highway 90 and U. S. Highways 10 and 12, 3 miles east of Missoula.

Drainage area.--5.47 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 19, 1959. Altitude of gage is 3,310 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	June 1959	0.3	13
1960	Apr. 7, 1960	.26	11
1961	May 27, 1961	.27	12
1962	Apr. 25, 1962	.53	15
1963	May 6, 1963	.38	7
1964	May 21, 1964	1.05	a 50
1965	May 29, 1965	.54	26
1966	April 1966	.20	a 10

204. Burke Gulch near Darby, Mont. (12-3443)

Location.--Lat $46^{\circ}02'$, long $114^{\circ}09'$, in S $\frac{1}{2}$ sec.12, T.3 N., R.21 W., 1 mile upstream from mouth, $1\frac{1}{2}$ miles east of Darby.

Drainage area.--6.28 sq mi.

Records available.--April 1958 to

Gage.--Staff gage installed Apr. 16, 1958. Crest-stage gage installed July 21, 1959. Altitude of gage is 4,100 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	May 12, 1958	0.94	11
1959	May 16, 1959	--	a 5
1960	Apr. 7, 1960	.85	8
1961	May 27, 1961	.40	2
1962	May 1962	(f)	a 4
1963	February 1963	1.08	13
1964	Apr. 21, 1964	.95	11
1965	Apr. 22, 1965	.95	7
1966	June 1966	.59	3

a About.

f Peak discharge did not reach bottom of gage.

205. Camas Creek near Hamilton, Mont. (12-3458)

Location.--Lat $46^{\circ}09'$, long $114^{\circ}13'$, in SW $\frac{1}{4}$ sec.34, T.5 N., R.21 W., 8 miles southwest of Hamilton.

Drainage area.--6.01 sq mi.

Records available.--April 1958 to

Gage.--Staff gage installed Apr. 17, 1958. Crest-stage gage installed July 21, 1959. Altitude of gage is 4,000 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	May 20, 1958	2.52	240
1959	June 7, 1959	2.30	190
1960	June 4, 1960	2.65	265
1961	May 28, 1961	2.30	190
1962	June 25, 1962	2.06	80
1963	May 25, 1963	2.03	74
1964	June 26, 1964	2.15	120
1965	June 12, 1965	2.39	148
1966	May 6, 1966	2.07	102

206. Willow Creek near Corvallis, Mont. (12-3485)

Location.--Lat $46^{\circ}17'40''$, long $113^{\circ}59'40''$, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.8, T.6 N., R.19 W., 800 ft downstream from Butterfly ranger station, half a mile downstream from Horn ditch, and 6 miles southeast of Corvallis.

Drainage area.--22.4 sq mi.

Records available.--April 1920 to May 1924 (no winter records), September 1957 to December 1965 (continuous record), January 1966 to

Gage.--Wire-weight gage. Crest-stage gage installed July 20, 1959. Altitude of gage is 4,130 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1920	June 22, July 2 1920	1.50	60
1921	June 9, 1921	2.04	114
1922	June 15, 1922	2.20	130
1923	June 26, 1923	1.80	d 92
1958	May 28, 1958	2.70	103
1959	June 21, 1959	2.56	84
1960	June 3, 1960	2.60	99
1961	May 30, 1961	2.60	88
1962	a June 13, 1962	2.56	88
1963	June 21, 1963	2.60	106
1964	June 17, 1964	2.70	144
1965	June 12, 1965	2.87	168
1966	May 28, 1966	1.39	61

a About.

d Maximum observed.

207. Gash Creek near Victor, Mont. (12-3502)

Location.--Lat $46^{\circ}24'$, long $114^{\circ}16'$, in $W\frac{1}{2}$ sec.32, T.8 N., R.21 W., 5 miles west of Victor.

Drainage area.--3.37 sq mi.

Records available.--July 1958 to

Gage.--Staff gage installed July 8, 1958. Crest-stage gage installed July 20, 1959. Altitude of gage is 5,500 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	May 21, 1958	--	a 200
1959	June 5, 1959	1.58	160
1960	June 4, 1960	.75	80
1961	May 28, 1961	1.57	99
1962	June 25, 1962	1.26	47
1963	June 5, 1963	1.19	a 60
1964	June 26, 1964	1.36	75
1965	June 12, 1965	1.81	165
1966	May 28, 1966	1.56	98

208. Kootenai Creek near Stevensville, Mont. (12-3505)

Location.--Lat $46^{\circ}32'30''$, long $114^{\circ}10'00''$, in $SW\frac{1}{4}NW\frac{1}{4}$ sec.18, T.9 N., R.20 W., 3 miles upstream from mouth and 4 miles northwest of Stevensville.

Drainage area.--28.9 sq mi.

Records available.--December 1948 to September 1953, August 1957 to September 1963 (continuous record), October 1963 to

Gage.--Water-stage recorder. Altitude of gage is 3,780 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1948	May-June 1948	--	1,250
1949	May 16, 1949	5.11	980
1950	June 17, 1950	5.85	1,300
1951	June 15, 1951	4.36	654
1952	June 6, 1952	3.76	381
1953	June 13, 1953	3.99	490
1958	May 24, 1958	5.63	1,080
1959	June 13, 1959	5.39	1,020
1960	June 16, 1960	5.30	998
1961	June 4, 1961	4.99	840
1962	June 16, 1962	4.53	630
1963	June 5, 1963	4.29	562
1964	June 8, 1964	4.88	790
1965	June 12, 1965	4.82	765
1966	May 27, 1966	4.27	535

209. Burnt Fork Creek near Stevensville, Mont. (12-3510)

Location.--Lat 46°27'50", long 113°56'40", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.11, T.8 N., R.19 W., 150 ft upstream from county road bridge and 8 miles southeast of Stevensville.

Drainage area.--74.0 sq mi.

Records available.--May to November 1920, April 1922 to September 1924 (no winter records), April to June 1938, October 1938 to September 1962 (continuous record), October 1962 to

Gage.--Staff gage. Crest-stage gage installed July 1959. Altitude of gage is 4,270 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1920	June 16, 1920	2.16	d 347
1922	June 10, 1922	2.64	d 620
1923	June 19, 1923	1.92	d 276
1924	May 18, 1924	1.90	d 268
1938	May 28, 1938	2.92	d 641
1939	May 4, 1939	1.74	d 192
1940	May 25, 1940	1.40	d 121
1941	June 4, 1941	1.36	d 119
1942	May 26, 1942	2.12	d 371
1943	June 19, 1943	2.04	d 382
1944	June 19, 1944	1.50	d 183
1945	June 4, 6, 1945	1.40	d 139
1946	May 28, 1946	1.43	d 142
1947	May 8, 9, 1947	2.20	d 414
1948	May 28, 29, 1948	2.54	d 565
1949	May 17, 1949	2.05	d 310
1950	June 21, 1950	2.22	d 379
1951	May 24, 1951	2.16	d 361
1952	May 26, 1952	1.86	d 233
1953	June 13, 1953	2.19	d 351
1954	June 28, 1954	2.09	d 300
1955	June 15, 1955	3.28	d 284
1956	May 24, 1956	3.72	d 414
1957	June 3, 4, 1957	3.46	d 320
1958	May 21, 22, 1958	3.48	d 371
1959	June 14, 1959	--	h 310
1960	June 5, 1960	3.24	317
1961	June 4, 1961	3.62	411
1962	June 14, 1962	3.28	303
1963	June 5, 1963	3.35	312
1964	June 8, 1964	4.73	720
1965	June 12, 1965	4.19	530
1966	May 27, 1966	3.15	240

d Maximum observed.

h Maximum daily.

210. Eightmile Creek near Florence, Mont. (12-3514)

Location.--Lat $46^{\circ}39'10''$, long $113^{\circ}57'30''$, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.2, T.10 N., R.19 W., 0.6 mile upstream from Granite Creek, 5 miles upstream from mouth, and 6 miles east of Florence.

Drainage area.--20.6 sq mi.

Records available.--September 1957 to September 1963 (continuous record), October 1963 to

Gage.--Water-stage recorder prior to October 1963. Crest-stage gage installed October 1963. Altitude of gage is 3,800 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1958	May 13, 1958	2.72	62
1959	June 6, 1959	2.06	33
1960	Apr. 10, 1960	2.03	30
1961	May 30, 1961	2.19	38
1962	May 25, 1962	2.27	36
1963	May 26, 1963	1.98	26
1964	June 8, 1964	3.60	104
1965	May 12, 1965	3.63	75
1966	Mar. 27, 1966	3.28	57

211. Hayes Creek near Missoula, Mont. (12-3522)

Location.--Lat $46^{\circ}49'$, long $114^{\circ}06'$, in center sec.10, T.12 N., R.20 W., at culvert on U. S. Highways 12 and 93, 2 miles southwest of Missoula.

Drainage area.--4.16 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 19, 1959. Altitude of gage is 3,300 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	0.6	3
1960	Apr. 5, 1960	3.77	56
1961	May 27, 1961	.70	4
1962	Apr. 24, 1962	1.34	14
1963	Mar. 22, 1963	.58	3
1964	May 22, 1964	1.63	21
1965	May 12, 1965	2.45	29
1966	Mar. 30, 1966	.52	2

j Peak flow occurred sometime during period May-June.

212. Nigger Gulch near Alberton, Mont. (12-3534)

Location.--Lat 47°01', long 114°32', in NW $\frac{1}{4}$ sec.33, T.15 N., R.23 W.,
at culvert on county road, 2.6 miles west of Alberton.

Drainage area.--8.02 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 19, 1959. Altitude of gage
is 3,000 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	0.7	23
1960	Apr. 6, 1960	.80	27
1961	May 2, 1961	.74	24
1962	May 29, 1962	.54	16
1963	May 6, 1963	.59	18
1964	June 9, 1964	1.01	67
1965	Apr. 28, 1965	2.05	170
1966	Mar. 30, 1966	.45	20

213. Flat Creek near Superior, Mont. (12-3537)

Location.--Lat 47°13', long 114°53', in NW $\frac{1}{4}$ sec.23, T.17 N., R.26 W.,
at culvert on county road, 2 miles north of Superior.

Drainage area.--13.0 sq mi.

Records available.--July 1959 to May 1961 (discontinued).

Gage.--Crest-stage gage installed July 3, 1959.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Apr. 6, 1960	0.31	Unknown
1961	--	--	Unknown

j Peak flow occurred sometime during period May-June.

214. Thompson Creek near Superior, Mont. (12-3538)

Location.--Lat $47^{\circ}12'$, long $114^{\circ}55'$, in SW $\frac{1}{4}$ sec.28, T.17 N., R.26 W.,
 $1\frac{1}{4}$ miles west of Superior.

Drainage area.--12.2 sq mi.

Records available.--May 1961 to

Gage.--Crest-stage gage installed May 15, 1961. Altitude of gage
 is 2,710 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1961	May 26, 1961	0.53	a 55
1962	Apr. 24, 1962	.82	85
1963	Apr. 14, 1963	.15	20
1964	May 21, 1964	.53	79
1965	Apr. 14, 1965	3.0	190
1966	May 4, 1966	.09	54

215. East Fork Timber Creek near Haugan, Mont. (12-3538.5)

Location.--Lat $47^{\circ}25'$, long $115^{\circ}25'$, in NE $\frac{1}{4}$ sec.16, T.19 N., R.30 W.,
 at culvert on county road 2 miles north of Haugan.

Drainage area.--2.72 sq mi.

Records available.--May 1961 to

Gage.--Crest-stage gage installed May 15, 1961. Altitude of gage is
 3,350 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1961	May 2, 1961	0.38	23
1962	Apr. 15, 1962	.82	45
1963	Apr. 14, 1963	.33	20
1964	May 22, 1964	.87	40
1965	Apr. 14, 1965	1.46	66
1966	Apr. 6, 1966	.48	27

216. St. Regis River tributary near St. Regis, Mont. (12-3539)

Location.--Lat 47°19', long 115°13', in NW $\frac{1}{4}$ sec.19, T.18 N., R.28 W., at culvert on Interstate Highway 90 and U. S. Highway 10, 6 miles west of St. Regis.

Drainage area.--1.16 sq mi.

Records available.--July 1959 to May 1961 (discontinued).

Gage.--Crest-stage gage installed July 3, 1959.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	0.5	Unknown
1960	May 9, 1960	.28	Unknown
1961	--	--	Unknown

217. North Fork Little Joe Creek near St. Regis, Mont. (12-3541)

Location.--Lat 47°16', long 115°09', in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.34, T.18 N., R.28 W., at bridge on county road, 3 miles southwest of St. Regis.

Drainage area.--14.7 sq mi.

Records available.--July 1959 to

Gage.--Crest-stage gage installed July 3, 1959. Altitude of gage is 2,850 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	May 12, 1960	1.84	179
1961	May 26, 1961	1.88	185
1962	May 27, 1962	1.16	91
1963	May 28, 1963	.95	57
1964	June 8, 1964	1.91	212
1965	May 29, 1965	1.83	200
1966	May 5, 1966	1.60	147

j Peak flow occurred sometime during period May-June.

218. Skyland Creek near Essex, Mont. (12-3560)

Location.--Lat $48^{\circ}17'30''$, long $113^{\circ}23'10''$, in $SE\frac{1}{4}NW\frac{1}{4}$ sec.9, T.29 N., R.14 W., 10 miles northeast of Essex.

Drainage area.--8.09 sq mi.

Records available.--January 1946 to September 1952 (continuous record), 1954, June 1959 to

Gage.--Water-stage recorder re-installed June 30, 1959, destroyed June 8, 1964. Crest-stage gage installed Sept. 10, 1964. Datum of gage is 4,835.83 ft above mean sea level, datum of 1929 (Corps of Engineers bench mark).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1946	May 28, 1946	1.72	117
1947	May 9, 1947	1.84	189
1948	May 22, 1948	2.15	284
1949	May 16, 1949	1.68	126
1950	June 12, 1950	2.46	268
1951	June 15, 1951	2.05	179
1952	May 15, 1952	1.87	148
1954	May 19, 1954	2.3	230
1959	June 5, 1959	2.1	189
1960	June 3, 1960	2.00	169
1961	May 30, 1961	2.48	267
1962	May 29, 1962	1.58	93
1963	June 5, 1963	1.52	82
1964	June 8, 1964	9.55	3,580
1965	May 29, 1965	4.76	a 120
1966	May 26, 1966	4.30	140

219. Moccasin Creek near West Glacier, Mont. (12-3573)

Location.--Lat $48^{\circ}29'$, long $113^{\circ}51'$, in SE $\frac{1}{4}$ sec.35, T.32 N., R.18 W., at culvert on U. S. Highway 2, $6\frac{1}{2}$ miles east of West Glacier.

Drainage area.--1.97 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 30, 1959. Altitude of gage is 3,300 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	1.3	102
1960	June 3, 1960	1.29	120
1961	May 27, 1961	1.43	105
1962	Apr. 24, 1962	1.17	50
1963	May 25, 1963	1.15	48
1964	June 8, 1964	--	Not determined
1965	May 29, 1965	5.60	Not determined
1966	May 26, 1966	4.11	Not determined

220. Middle Fork Flathead River tributary at West Glacier, Mont. (12-3574)

Location.--Lat $48^{\circ}30'$, long $113^{\circ}58'$, in NE $\frac{1}{4}$ sec.36, T.32 N., R.19 W., at culvert on U. S. Highway 2, 0.9 mile east of West Glacier.

Drainage area.--0.10 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 30, 1959. Altitude of gage is 3,250 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	Apr. 3, 1960	0.27	3
1961	May 2, 1961	.19	2
1962	Apr. 23, 1962	.11	1
1963	--	(f)	<.5
1964	June 8, 1964	.32	a 8
1965	Apr. 21, 1965	.49	9
1966	June 4, 1966	.40	6

a About.

f Peak discharge did not reach bottom of gage.

j Peak flow occurred sometime during period May-June.

221. Spring Creek near Stryker, Mont. (12-3638)

Location.--Lat $48^{\circ}38'$, long $114^{\circ}41'$, in $N\frac{1}{2}$ sec.15, T.33 N., R.24 W., at culvert on U. S. Highway 93, 5 miles southeast of Stryker.

Drainage area.--3.86 sq mi.

Records available.--July 1959 to May 1961 (discontinued).

Gage.--Crest-stage gage installed July 1, 1959. Altitude of gage is 3,260 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	0.7	12
1960	June 3, 1960	-.08	8
1961	May 15, 1961	.62	10

222. Rock Creek near Olney, Mont. (12-3639)

Location.--Lat $48^{\circ}37'$, long $114^{\circ}39'$, in $NW\frac{1}{4}$ sec.24, T.33 N., R.24 W., at culvert on U. S. Highway 93, 6 miles northwest of Olney.

Drainage area.--6.18 sq mi.

Records available.--May 1961 to

Gage.--Crest-stage gage installed May 16, 1961. Altitude of gage is 3,240 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1961	e May 15, 1961	a 1.2	24
1962	May 21, 1962	.82	13
1963	May 14, 1963	.56	6
1964	May 2, 1964	1.29	25
1965	Apr. 28, 1965	1.40	29
1966	June 4, 1966	.96	14

a About.

e Prior to installation of gage.

j Peak flow occurred sometime during period May-June.

223. Dayton Creek near Proctor, Mont. (12-3705)

Location.--Lat $47^{\circ}55'$, long $114^{\circ}20'$, in NW $\frac{1}{4}$ sec.20, T.25 N., R.21 W., at culvert on county road, $2\frac{1}{2}$ miles northwest of Proctor.

Drainage area.--20.9 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 18, 1959. Altitude of gage is 3,350 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	1.3	37
1960	May 12, 1960	1.74	51
1961	May 27, 1961	3.00	93
1962	Apr. 24, 1962	1.54	45
1963	Apr. 13, 1963	.28	7
1964	June 8, 1964	1.06	29
1965	Apr. 15, 1965	5.09	131
1966	Mar. 29, 1966	1.03	28

224. Teepee Creek near Polson, Mont. (12-3709)

Location.--Lat $47^{\circ}49'$, long $114^{\circ}01'$, in SW $\frac{1}{4}$ sec.23, T.24 N., R.19 W., at culvert on State Highway 35, 11 miles northeast of Polson.

Drainage area.--2.55 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 29, 1959. Altitude of gage is 2,910 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	June 3, 1960	0.48	11
1961	June 2, 1961	.90	22
1962	Apr. 24, 1962	.05	4
1963	--	(f)	<1
1964	June 8, 1964	2.15	44
1965	June 12, 1965	.32	8
1966	May 26, 1966	.18	6

f Peak discharge did not reach bottom of gage.

j Peak flow occurred sometime during period May-June.

225. Hell Roaring Creek near Polson, Mont. (12-3711)

Location.--Lat $47^{\circ}42'$, long $114^{\circ}03'$, in NW $\frac{1}{4}$ sec.4, T.22 N., R.19 W., at power house, $5\frac{1}{2}$ miles east of Polson.

Drainage area.--6.41 sq mi.

Records available.--May 1917 to September 1932 (continuous record), June 1959 to . Prior to 1959, published as Big Creek near Polson.

Gage.--Crest-stage gage installed June 29, 1959. May 1917 to September 1932, water-stage recorder. Altitude of gage is 3,150 ft (by barometer).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1917	June 9, 1917	--	d 104
1918	June 11-14, 1918	--	38
1919	May 27, 1919	--	69
1920	May 14, 1920	--	29.4
1921	June 7, 1921	--	23.3
1922	May 20, 1922	--	49
1923	June 22, 1923	--	29.7
1924	May 17, 1924	--	27.2
1925	May 22, 1925	--	61
1926	May 1, 1926	--	34
1927	June 11, 1927	--	61
1928	May 23, 1928	--	39.5
1929	May 25, 1929	--	33.3
1930	May 25, 1930	--	14.1
1931	Dec. 1, 1930	--	h 8.3
1932	Mar. 19, 1932	--	h 9.0
1948	May 1948	--	85
1959	e May 1959	a 1.3	60
1960	June 3, 1960	.81	27
1961	June 2, 1961	.93	34
1962	Apr. 24, 1962	.49	12
1963	Apr. 15, 1963	.28	5
1964	June 8, 1964	1.73	98
1965	June 12, 1965	--	a 20
1966	March 1966	-1.54	a 3

a About.

d Maximum observed.

e Prior to installation of gage.

h Maximum daily.

226. Mill Creek near Niarada, Mont. (12-3743)

Location.--Lat $47^{\circ}50'$, long $114^{\circ}41'$, in NE $\frac{1}{4}$ sec.20, T.24 N., R.24 W., at bridge on county road, $3\frac{1}{2}$ miles northwest of Niarada.

Drainage area.--28.0 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 18, 1959. Altitude of gage is 3,000 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	1.1	90
1960	May 13, 1960	1.00	74
1961	May 1, 1961	1.42	140
1962	Apr. 24, 1962	.97	70
1963	May 17, 1963	.78	45
1964	May 27, 1964	.91	52
1965	Apr. 15, 1965	1.43	175
1966	May 12, 1966	2.22	a 250

227. Sullivan Creek tributary near Niarada, Mont. (12-3747)

Location.--Lat $47^{\circ}53'$, long $114^{\circ}34'$, in N $\frac{1}{2}$ sec.33, T.25 N., R.23 W., at culvert on county road, 5 miles northeast of Niarada.

Drainage area.--

Records available.--June 1959 to May 1961 (discontinued).

Gage.--Crest-stage gage installed June 18, 1959.

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1960	March 1960	--	a 1
1961	--	--	Unknown

a About.

j Peak flow occurred sometime during period May-June.

228. South Fork Garden Creek near Hot Springs, Mont. (12-3757)

Location.--Lat $47^{\circ}39'$, long $114^{\circ}43'$, in SW $\frac{1}{4}$ sec.20, T.22 N., R.24 W.,
at bridge on county road, 3 miles north of Hot Springs.

Drainage area.--3.29 sq mi.

Records available.--June 1959 to

Gage.--Crest-stage gage installed June 18, 1959. Altitude of gage
is 3,300 ft (from topographic map).

Annual maximum data.--

<u>Water year</u>	<u>Date</u>	<u>Gage height (ft)</u>	<u>Discharge (cfs)</u>
1959	(j)	--	a 10
1960	April 1960	--	a 5
1961	May 27, 1961	0.86	29
1962	May 23, 1962	.48	14
1963	May 17, 1963	.73	24
1964	May 27, 1964	1.02	a 45
1965	Apr. 29, 1965	--	a 100
1966	Mar. 29, 1966	-.22	Not determined

a About.

j Peak flow occurred sometime during period May-June.

Index to gaging stations

Station Name	Page
Alkali Creek near Heath.	49
Alkali Creek near Malta.	61
Allen Creek near Park City	81
Andresen Coulee near Custer.	85
Antelope Creek at Harlowton.	43
Antelope Creek tributary near Harlowton.	42
Antelope Creek tributary near mouth, near Harlowton.	42
Antelope Creek tributary No. 2 near Harlowton.	43
Basin Creek near Volborg	95
Basin Creek tributary near Volborg	94
Bear Canyon Creek near Bozeman	21
Bear Creek, South Fork, near Roy	46
Bear Creek, South Fork, tributary near Roy	47
Beaver Creek at Gibson Dam, near Augusta	31
Beaverhead River tributary near Dillon	14
Beaverhead River tributary No. 2 near Dillon	14
Berry Creek near Columbus.	81
Big Muddy Creek at Plentywood.	74
Big Muddy Creek tributary near Culbertson.	77
Big Sandy Creek near Assinniboine.	59
Black Coulee near Malta.	61
Box Elder Creek at damsite, near Plentywood.	75
Box Elder Creek near Plentywood.	75
Box Elder Creek tributary near Winnett	47
Bridger Creek near Greycliff	79
Bruce Coulee tributary near Choteau.	37
Buckingham Coulee near Meyers.	86
Bullhook Creek near Havre.	60
Burke Gulch near Darby	118
Burnt Fork Creek near Stevensville	121
Butts Coulee near Melstone	46
Cabin Creek near Townsend.	22
Camas Creek near Hamilton.	119
Casino Creek tributary near Lewistown.	40
Castle Creek tributary near Ringling	22
Cat Creek near Cat Creek	52
Clark Fork tributary near Drummond	116
Coal Bank Creek, North Fork, near Mill Iron.	107
Cottonwood Creek near Moore.	40
Cottonwood Creek tributary near Chester.	34
Cottonwood Creek tributary No. 2 near Chester.	35
Cow Creek tributary near Vida.	72
Crooked Creek tributary near Shepherd.	84
Crystal Creek near East Helena	24

Index to gaging stations - Continued

Station Name	Page
Currant Creek near Roundup.	44
Cyclone Creek near Yaak.	114
Dayton Creek near Proctor	130
Dead Indian Coulee near Fort Benton	35
Deep Creek below North Fork Deep Creek, near Townsend	23
Deep Creek near Baker	100
Deep Creek near Fortine	110
Deep Creek near Kinsey.	97
Disjardin Coulee near Malta	62
Dog Creek near Craig.	26
Dry Ash Creek, South Fork, near Circle.	71
Dry Fork Coulee tributary near Loma	36
Dry House Creek near Angela	96
Duck Creek, East Fork, near Brockway.	68
Duck Creek near Brockway.	68
Duval Creek near Landusky	41
East Gallatin River near Bozeman.	20
Edwards Gulch at Drummond	117
Eightmile Creek near Florence	122
First Hay Creek near Sidney	104
Fish Creek near Silverstar.	16
Five Mile Creek near White Sulphur Springs.	27
Flat Creek near Superior.	123
Flathead River, Middle Fork, tributary at West Glacier.	127
Fortine Creek near Trego.	109
Fourth of July Creek near Yaak.	115
Froze to Death Creek, Middle Fork, tributary near Ingomar.	86
Garden Creek, South Fork, near Hot Springs.	132
Gash Creek near Victor.	120
Gold Creek near Rexford	111
Goodman Coulee near Eden.	30
Gorman Coulee near Cat Creek.	51
Gorman Coulee tributary near Cat Creek.	51
Grasshopper Creek near Dillon	13
Griffith Creek near Glendive.	102
Hayes Creek near Missoula	122
Heines Coulee tributary near Valier	33
Hell Roaring Creek near Polson.	129
Home Creek near Melstone.	45
Hump Creek near Reed Point.	80
Idaho Creek near Alder.	15
Indian Creek at Intake.	103

Index to gaging stations - Continued

Station Name	Page
Jackson Creek near East Helena.	24
Jefferson River tributary near Whitehall.	16
Jefferson River tributary No. 2 near Whitehall.	17
Jefferson River tributary No. 3 near Sappington.	18
Jefferson River tributary No. 4 near Three Forks.	18
Jefferson River tributary No. 5 near Three Forks.	19
Judith River tributary near Utica.	39
Judith River tributary No. 2 near Utica.	39
Kinley Coulee near Dutton.	38
Kinley Coulee tributary near Dutton.	38
Kootenai Creek near Stevensville.	120
Kootenai River tributary near Rexford.	110
Krug Creek tributary near Wibaux.	102
Leaf Rock Creek near Kirby.	92
Linden Creek at Intake.	103
Little Dry Creek near Van Norman.	54
Little Jackson Creek near Libby.	111
Little Joe Creek, North Fork, near St. Regis.	125
Little Porcupine Creek near Forsyth.	87
Little Porcupine Creek tributary near Helena.	25
Livermore Creek near Babb.	54
Logger Creek near Gallatin Gateway.	20
Lone Man Coulee near Valier.	33
Long Creek near Lakeview.	9
Lyons Creek near Wolf Creek.	26
McClellan Creek at city diversion dam, near East Helena.	25
McCune Creek near Circle.	71
McDonald Creek at Winnett.	50
McDonald Creek, North Fork, tributary near Heath.	48
McDonald Creek, South Fork, tributary near Grass Range.	49
Marias River, Middle Fork Dry Fork, near Dupuyer.	32
Marias River tributary at Loma.	36
Marias River tributary No. 2 at Loma.	37
Marias River tributary No. 3 near Chester.	34
Marshall Creek near Missoula.	118
Meadow Creek near Locate.	97
Meyers Creek near Locate.	98
Milk River, Dry Fork, near Babb.	55
Milk River, Middle Fork, near Babb.	55
Milk River near Del Bonita.	56
Milk River tributary near Lohman.	60
Milk River tributary No. 2 near Glasgow.	64
Mill Creek near Niarada.	131
Missouri River tributary near Landusky.	41
Missouri River tributary No. 2 near Brockton.	73

Index to gaging stations - Continued

Station Name	Page
Missouri River tributary No. 3 near Culbertson.	77
Missouri River tributary No. 4 near Bainville	78
Missouri River tributary No. 5 at Culbertson.	78
Mitchell Gulch near East Helena	23
Moccasin Creek near West Glacier.	127
Mooney Coulee near Tampico.	63
Moose Creek near Divide	15
Morris Creek near Drummond.	116
Muddy Creek near Dell	10
Muddy Creek tributary near Power.	31
Musselshell River tributary near Musselshell.	45
Newland Creek near White Sulphur Springs.	28
Nigger Gulch near Alberton.	123
North Creek near Alzada	105
Nugget Creek near Neihart	29
O'Fallon Creek near Ismay	99
O'Fallon Creek tributary near Ismay	99
Pennel Creek near Baker	100
Peoples Creek near Libby.	112
Pitcher Creek near Bozeman.	21
Pryor Creek near Billings	83
Red Rock River tributary near Monida.	9
Redwater Creek at Brockway.	69
Redwater Creek tributary near Brockway.	70
Ridgewalker Creek near Busby.	89
Rock Creek near Olney	128
Rosebud Creek near Forsyth.	90
Rosebud Creek near Kirby.	88
Rosebud Creek tributary near Busby.	88
Sage Creek tributary at Hingham	57
Sage Creek tributary near Dell.	12
St. Regis River tributary near St. Regis.	125
Sand Creek at Sappington.	17
Sand Creek, East Fork, near Vida.	64
Sand Creek near Broadus	98
Second Creek tributary near Jordan.	52
Second Creek tributary No. 2 near Jordan.	53
Second Creek tributary No. 3 near Jordan.	53
Severn Gulch near Jennings.	112
Shaughnessy Creek near Libby.	113
Sheep Creek below Muddy Creek, near Dell.	11
Sheep Creek near Neihart.	29
Skyland Creek near Essex.	126
Smith Gulch near Silverbow.	115

Index to gaging stations - Continued

Station Name	Page
Smith River tributary near Eden.	30
Snell Creek near Hathaway.	91
Soda Creek tributary near Webster.	108
South Willow Creek tributary near Roundup.	44
Spring Coulee near Havre	58
Spring Coulee, South Fork, near Havre.	57
Spring Creek at Highway 16, near Plentywood.	76
Spring Creek near Ashland.	92
Spring Creek near Decker	91
Spring Creek near Plentywood	76
Spring Creek near Stryker.	128
Spring Creek near Wibaux	108
Squaw Creek near Gallatin Gateway.	19
Stebbins Creek at mouth, near Ashland.	94
Stebbins Creek near Ashland.	93
Sullivan Creek tributary near Niarada.	131
Sun River tributary near Great Falls	32
Sunday Creek, North Fork, tributary at Rock Springs. . .	95
Sunday Creek, North Fork, tributary No. 2 near Angela. .	96
Taylor Creek, South Fork, near Malta	62
Teepee Creek near Polson	129
Thompson Creek near Superior	124
Timber Creek, East Fork, near Haugan	124
Traux Creek near Lima.	10
Tub Gulch near Libby	113
Tusler Creek near Brockway	69
Tusler Creek tributary near Brockway	70
Unger Creek near Vandalia.	63
Unknown Creek near Bighorn	85
Van Cleeve Coulee tributary near Sunburst.	56
Walking Horse Creek near Ashland	93
War Dance Creek near Intake.	104
Wegner Creek at Craig.	27
West Buckeye Creek near Billings	82
West Twin Creek near Bonner.	117
Wets Creek near Billings	82
Whitedirt Creek near Lame Deer	89
Whitetail Creek near Yaak.	114
Willow Creek near Alzada	107
Willow Creek near Corvallis.	119
Wolf Creek, East Fork, near Lustre	65
Wolf Creek near Hammond.	106
Wolf Creek near Wolf Point	67
Wolf Creek tributary near Vida	72
Wolf Creek tributary near Wolf Point	66

Index to gaging stations - Continued

Station Name	Page
Wolf Creek tributary No. 2 near Wolf Point.	66
Wolf Creek, West Fork, near Lustre.	65
Work Creek near Reed Point.	80
Yellowstone River tributary near Greycliff.	79
Yellowstone River tributary No. 2 near Pompeys Pillar .	84
Yellowstone River tributary No. 3 near Forsyth.	87
Yellowstone River tributary No. 4 near Fallon	101
Yellowstone River tributary No. 5 near Marsh.	101

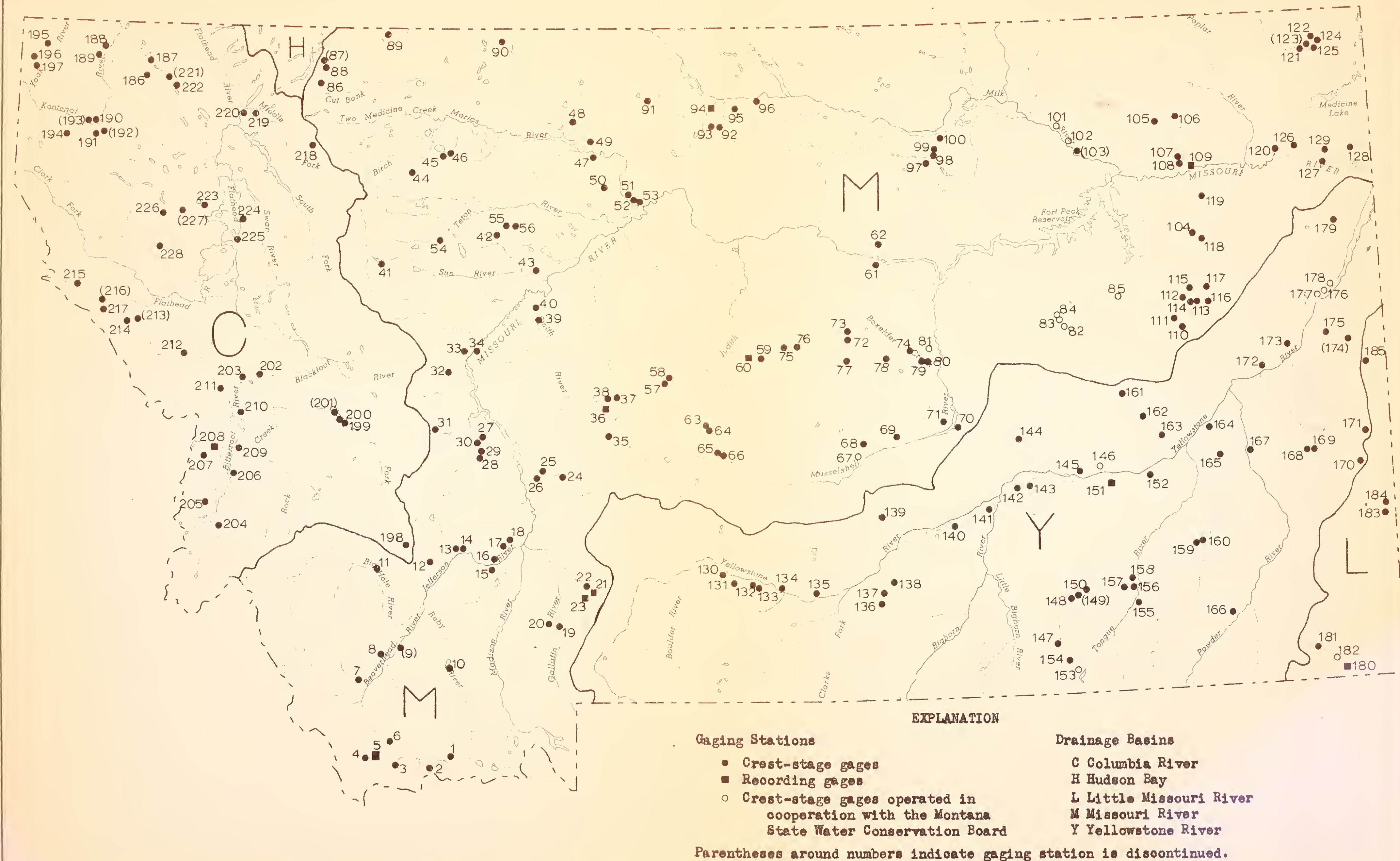


Figure 1.--Map showing location of gaging stations and major drainage basins.

